

# **Table of Contents**

## **Volume 1**

### **PART I. INTRODUCTION**

#### **CHAPTER 1. COMPARATIVE ENVIRONMENTAL LAW ON THE INTERNET**

- § 1:1 Research guide to access environmental law via the internet
- § 1:2 The criterion for environmental law research
- § 1:3 —Reliability indicators
- § 1:4 —Further general considerations
- § 1:5 —Updates on environmental law URLs
- § 1:6 Comparative environmental law URLs

### **PART II. AIR, CLIMATE, ENERGY, AND WATER**

#### **CHAPTER 2. MODERN CHALLENGES: CLIMATE, INNOVATION, AND JUSTICE**

- § 2:1 Introduction
- § 2:2 Comparative Environmental Timeline
- § 2:3 Metal Mining and Renewable Dynamics
- § 2:4 Environmental Human Rights Evolving Best Practices
- § 2:5 Nuclear Governance: Public Health and Environmental Dynamics
- § 2:6 Global Environmental Dynamics: Applied good governance timeline

#### **CHAPTER 3. PERSISTENT THREATS FROM PFAS—BY ELIZABETH BURLESON**

- § 3:1 The Persistent Threat of PFAS: Regulatory Actions and Environmental Impact
- § 3:2 PFAS Timeline

## **CHAPTER 4. FROM FRAGMENTATION TO INNOVATION COORDINATION—BY ELIZABETH BURLESON**

### **I. INTRODUCTION**

- § 4:1 The ICJ Advisory Opinion on State Obligations on Climate Change: The 1.5°C Temperature Goal
- § 4:2 International Court of Justice Press Release: Obligation of States in Respect of Climate Change
- § 4:3 Climate Change Displacement to Refuge
- § 4:4 Climate Change, Human Rights Law, and Refugees
- § 4:5 Security Council
- § 4:6 International Cooperation
- § 4:7 Way Forward
- § 4:8 In general

### **II. LAW AND ECONOMICS: TRANSNATIONAL NETWORK THEORY**

- § 4:9 In general
- § 4:10 Methodology
- § 4:11 Network theory
- § 4:12 Bringing climate technology networking into focus
- § 4:13 —Taking stock of environmentally sound innovation network coordination
- § 4:14 —Why cooperate at the international level? Energy-climate market failure
- § 4:15 Uncertainty, risk, and life cycle analysis

### **III. ENVIRONMENTALLY SOUND INNOVATION SHARING VIA NETWORK COORDINATION**

- § 4:16 In general
- § 4:17 Prioritizing human rights and environmental public goods
- § 4:18 Taking stock of innovation networking governance
- § 4:19 Recommendations for inclusive innovation hubs
- § 4:20 Looking forward: Catalytic intra-network dynamics

### **IV. FROM REGIME SHIFTING TO INTERNATIONAL NETWORK COORDINATION**

- § 4:21 In general
- § 4:22 Trade and environment policy coherence
- § 4:23 —Free standing innovation sharing agreement
- § 4:24 —WTO consideration of infant renewable subsidies
- § 4:25 —Optimizing environmentally sound innovation hubs

### **V. RECOMMENDATIONS FOR CLOSING THE INNOVATION AND DIFFUSION GAP**

- § 4:26 In general

## **VI. CONCLUSION**

§ 4:27 In general

### **CHAPTER 5. NOTE ON THE UNITED NATIONS SECRETARY-GENERAL'S REPORT, "GAPS IN INTERNATIONAL ENVIRONMENTAL LAW AND ENVIRONMENT-RELATED INSTRUMENTS: TOWARDS A GLOBAL PACT FOR THE ENVIRONMENT"**

- § 5:1 Executive Summary
- § 5:2 Welcoming the Secretary-General's Report
- § 5:3 An Urgent and Common Concern for the Earth
- § 5:4 Furthering the Progressive Development of Environmental Law
- § 5:5 Providing References to Principles for the 2019 Consultations in Nairobi
- § 5:6 General Principles of International Environmental Law
- § 5:7 Gaps in existing international environmental agreements
- § 5:8 Environment-related instruments: Relationships of environmental agreements with instruments in other fields of international law
- § 5:9 Gaps relating to the governance structure of international environmental law
- § 5:10 Implementation and effectiveness of international environmental law
- § 5:11 International Environmental Law, the Sustainable Development Goals and the 2030 Development Agenda
- § 5:12 Conclusions
- § 5:13 Appendix—The ICEL Charts

### **CHAPTER 6. TRANSNATIONAL PERSPECTIVES ON THE PARIS CLIMATE AGREEMENT BEYOND PARIS: REDRESSING AMERICAN DEFAULTS IN CARING FOR EARTH'S BIOSPHERE—BY NICHOLAS A. ROBINSON**

- § 6:1 Introduction
- § 6:2 Assessing how to strengthen environmental law to sustain the paris agreement
- § 6:3 American ambivalence toward international environmental law
- § 6:4 The paris agreement, president trump, and american deficiencies
- § 6:5 Shaping a law for nature
- § 6:6 Emergent international leadership
- § 6:7 The right to the environment as an emergent remedy

- § 6:8 Remediating short falls in environmental law
- § 6:9 The fundamental right to the environment—The keystone  
for general principles of international environmental law
- § 6:10 Conclusion—Nairobi and beyond

## **CHAPTER 7. SEVERAL STEPS FORWARD, ONE BACKWARD: CLIMATE CHANGE, LATIN AMERICA, AND HUMAN RIGHTS RESILIENCE—BY ROSA CELORIO**

- § 7:1 Introduction
- § 7:2 Latin America and climate change: action, ambition, and  
response
- § 7:3 Strategies to address climate change in latin America:  
international human rights law as a key ingredient
- § 7:4 Conclusion

## **CHAPTER 8. CARBON TRADING— INTERNATIONAL COORDINATION TO ADDRESS CLIMATE CHANGE—BY PIANPIAN WANG**

### **I. INTRODUCTION**

- § 8:1 Carbon trading

### **II. KYOTO PROTOCOL**

- § 8:2 History
- § 8:3 Creating the international carbon market
- § 8:4 Performance of the international carbon market
- § 8:5 Kyoto Protocol results

### **III. PARIS AGREEMENT**

- § 8:6 History
- § 8:7 Approaches to implementing the Paris Agreement
- § 8:8 Issues affecting implementation

### **IV. CARBON OFFSETTING AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION (CORSIA)**

- § 8:9 Implementation
- § 8:10 Program development
- § 8:11 The Importance of CORSIA

### **V. EU EMISSION TRADING SCHEME (EU ETS)**

- § 8:12 Implementation
- § 8:13 Program development

## TABLE OF CONTENTS

§ 8:14 Program performance

### **VI. CANADA CARBON TRADING**

§ 8:15 Implementation

§ 8:16 Program development

§ 8:17 Program performance

### **VII. NEW ZEALAND EMISSION TRADING SCHEME (NZ ETS)**

§ 8:18 Implementation

§ 8:19 Program development

§ 8:20 Program performance

### **VIII. JAPAN CARBON TRADING**

§ 8:21 Implementation

§ 8:22 Japan Voluntary Emission Trading Scheme

§ 8:23 Tokyo trading scheme

§ 8:24 Saitama Cap-and trade program

### **IX. CHINA CARBON TRADING**

§ 8:25 Implementation

### **X. CONCLUSION**

§ 8:26 Comparisons

## **PART III. CHEMICALS AND WASTE**

### **CHAPTER 9. NUCLEAR GOVERNANCE PUBLIC HEALTH AND ENVIRONMENTAL DYNAMICS**

§ 9:1 Highlights

§ 9:2 Nuclear Dynamics Timeline

§ 9:3 Nuclear Lessons Yet to Be Learned

## **PART IV. WILDLIFE AND NATURAL RESOURCES**

### **CHAPTER 10. ILLEGAL IVORY TRADE: COMPARATIVE APPLICATION OF CITES IN KENYA AND CHINA—BY MARY MUTHONI**

§ 10:1 Introduction

§ 10:2 Background

§ 10:3 Thesis statement

- § 10:4 Methodology
- § 10:5 The nature of CITES with other conventions and its legal enforcement
- § 10:6 The symbiotic relationship between CITES and CBD
- § 10:7 How CITES works and implication of being a member state
- § 10:8 Illegal Ivory trade, its impacts and the relationship between consumer and producer countries
- § 10:9 Importance of elephants
- § 10:10 IIT as an environmental crime and its impacts
- § 10:11 Controversies on the use of ivory, the CoP, and the relationship to IIT
- § 10:12 Relationship between producer and consumer countries
- § 10:13 CITES enforcement and compliance
- § 10:14 Application and implementation of CITES in national laws
- § 10:15 —Kenya
- § 10:16 —China
- § 10:17 Analysis of Penalties given for Illegal Ivory Trade
- § 10:18 —Kenya
- § 10:19 —China
- § 10:20 Challenges on enforcing CITES in Kenya and China
- § 10:21 Conclusion and recommendations

## **PART V. REGIONAL AND COUNTRY CASE STUDIES**

### **CHAPTER 11. ARCTIC ENVIRONMENTAL LAW—BY TIMO KOIVUROVA**

- § 11:1 Introduction
- § 11:2 Early Arctic environmental law
- § 11:3 The evolution of the Arctic-wide cooperation
- § 11:4 Examples of soft-law guidance from the Arctic-wide cooperation
- § 11:5 Arctic Monitoring and Assessment working-group
- § 11:6 Protection of the Arctic Marine Environment (PAME) working-group
- § 11:7 Conservation of Arctic Flora and Fauna working-group
- § 11:8 Emergency Prevention, Preparedness and Response (EPPR) working group
- § 11:9 Intentional crafting of Arctic environmental law and policy to combat the outside sources of pollution
- § 11:10 Arctic environmental law and policy tackling the challenge posed by new economic activities entering the region
- § 11:11 Conclusions

TABLE OF CONTENTS

**CHAPTER 12. EQUITABLE AND REASONABLE  
USE OF WATER WITHIN THE EUPHRATES-  
TIGRIS RIVER BASIN—BY ELIZABETH  
BURLESON**

- § 12:1 Introduction
- § 12:2 Sovereignty Versus Integrity
- § 12:3 Article 6 of the Convention on the Law of Non-Navigational  
Uses of International Watercourses
- § 12:4 From Conflict to Consensus
- § 12:5 Conclusion

**CHAPTER 13. ENVIRONMENTAL  
HARMONIZATION: EMERGENCE AND  
DEVELOPMENT OF THE ANDEAN  
COMMUNITY—BY VICTOR M. TAFUR, LL.M**

**I. INTRODUCTION**

- § 13:1 In general

**II. THE AMERICAN INTEGRATION SYSTEM: ITS  
ORIGIN AND COMPOSITION**

- § 13:2 The Andean Community
- § 13:3 The origin of the Andean Integration System (AIS)
- § 13:4 The executive tasks of the AIS—Andean Presidential  
Council
- § 13:5 —General Secretariat of the Andean Community
- § 13:6 The legislative tasks of the AIS—Commission of the  
Andean Community
- § 13:7 —Andean Council of Ministers of Foreign Affairs
- § 13:8 —The Andean Parliament
- § 13:9 Court of Justice of the Andean Community
- § 13:10 Other Andean Councils, Commissions and Institutions

**III. POLICY HARMONIZATION AND THE  
ENVIRONMENT**

- § 13:11 In general
- § 13:12 Common Regime on access to genetic resources
- § 13:13 Common agriculture policy and phytosanitary system
- § 13:14 Common environmental policy

**IV. DISCUSSION OF CURRENT HARMONIZATION  
TRENDS IN THE ANDEAN COMMUNITY**

- § 13:15 In general

**V. CONCLUSION**

- § 13:16 In general

## **CHAPTER 14. ENVIRONMENTAL LAW IN THE ASSOCIATION OF SOUTH-EAST ASIAN NATIONS (ASEAN)—BY KOH KHENG-LIAN**

- § 14:1 Introduction
- § 14:2 Transboundary environmental issues: Intra-ASEAN
- § 14:3 —The Indonesian Haze
- § 14:4 —Zoonotic diseases affecting the ASEAN region and the world
- § 14:5 Role of ASEAN in addressing global environmental issues
- § 14:6 —United Nations millennium development goal of reducing biodiversity loss
- § 14:7 —“ASEAN Statement on CITES” and ASEAN Wildlife Law Enforcement Network (ASEAN-WEN)
- § 14:8 —Climate change and energy
- § 14:9 Towards policy integration in transboundary environmental issues
- § 14:10 Restructuring ASEAN environmental governance: Shaping up to cope with transnational environmental challenges
- § 14:11 —ASEAN Summit, Article 7
- § 14:12 —ASEAN Coordinating Council, Article 8
- § 14:13 —ASEAN Socio-Cultural Community Council, Article 9
- § 14:14 —ASEAN Sectoral Ministerial Bodies, Article 10
- § 14:15 —Secretary-General of ASEAN and ASEAN Secretariat, Article 11
- § 14:16 —Committee of Permanent Representatives to ASEAN, Article 12
- § 14:17 —ASEAN National Secretariats, Article 13
- § 14:18 —Dispute Settlement (Articles 22, 23, 24, 25 and 26)
- § 14:19 —ASEAN Human Rights Body, Article 14
- § 14:20 —ASEAN Foundation, Article 15
- § 14:21 —Entities Associated with ASEAN, Article 16
- § 14:22 —ASEAN’s External Relations, Chapter XII
- § 14:23 The ASEAN Voice: Strengthening environmental governance
- § 14:24 Conclusion

Appendix 14-A. ASEAN Environmental Governance ASEAN Charter, 2007

## **CHAPTER 15. THE ASEAN CHARTER: A LEGAL FRAMEWORK FOR ASEAN—BY PAUL J. DAVIDSON**

- § 15:1 Introduction
- § 15:2 The ASEAN Charter
- § 15:3 —History of the Charter
- § 15:4 — —Legal personality
- § 15:5 — —Effective monitoring, compliance and dispute settlement mechanisms



## TABLE OF CONTENTS

- § 15:6 — —Organisational structure
- § 15:7 — —Impact of the Charter on the legal framework of ASEAN
- § 15:8 — —Legal personality
- § 15:9 — —Rules-based
- § 15:10 — —Dispute settlement/compliance mechanism
- § 15:11 — —Institutions
- § 15:12 Continuing the ASEAN Way
- § 15:13 Conclusion

## **CHAPTER 16. ENVIRONMENTAL PANDEMIC DYNAMICS TIMELINE—BY PROF. ELIZABETH BURLESON**

### **I. RECENT DEVELOPMENTS AND HIGHLIGHTS**

- § 16:1 Highlights

### **II. COVID-19 PANDEMIC DYNAMICS**

- § 16:2 Food security and pandemic dynamics: social distancing & the fragility of the industrial food supply
- § 16:3 Elder resilience pandemic environmental justice dynamics
- § 16:4 “Good” governance and pandemic dynamics

## **CHAPTER 17. GLOBAL ENVIRONMENTAL DYNAMICS—BY PROF. ELIZABETH BURLESON**

### **I. INTRODUCTION**

- § 17:1 Introduction

### **II. SUSTAINABILITY AND THE FUTURE**

- § 17:2 Sustainability recommendations
- § 17:3 Way forward

### **III. APPLICATION**

- § 17:4 Applied good governance
- § 17:5 Applied courage: people power exemplified by Rep. Conrad

## **CHAPTER 18. FORESTS AND FIRE**

- § 18:1 Highlights
- § 18:2 Adirondack forest keeping: good governance model
- § 18:3 Change agents +
- § 18:4 Reforestation and rewilding: forest dynamics timeline
- § 18:5 Forest keeping pandemic dynamics
- § 18:6 Fire environmental dynamics
- § 18:7 Fire environmental dynamics timeline

## **CHAPTER 19. POLAR NATURAL AREAS**

§ 19:1 In General

§ 19:2 Polar Commons Sustainability Dynamics Timeline

## **PART VI. NATIONAL ENVIRONMENTAL LAWS**

### **CHAPTER 20. ENVIRONMENTAL LAW OF ARGENTINA—BY HERNAN LOPEZ**

#### **I. INTRODUCTION**

§ 20:1 In general

#### **II. ADMINISTRATION I**

§ 20:2 Legal tradition

§ 20:3 —The Civil Code

§ 20:4 Constitution

§ 20:5 Organization of government—Type of government: Federal Republic

§ 20:6 — —The distribution of the environmental authority in the federal scheme of government

§ 20:7 —Government structure

§ 20:8 —Environmental agencies—Executive power

§ 20:9 — —Inter-federal agencies

§ 20:10 — —Legislative power

§ 20:11 —Judicial system: Administrative and judicial process of review

§ 20:12 Different types of laws: National/Federal and state laws and municipal ordinances

§ 20:13 Adherence to environmental treaties: Legal statute of international treaties

§ 20:14 The MERCOSUR legislation

#### **III. ADMINISTRATION II**

§ 20:15 Standards

§ 20:16 Permits

§ 20:17 Economics incentives/disincentives

§ 20:18 Zoning and land use controls

§ 20:19 Environmental Impact Assessment (EIA)

§ 20:20 Enforcement of environmental law

§ 20:21 Public participation

#### **IV. POLLUTION**

§ 20:22 Water (surface/ground)

§ 20:23 Air

## TABLE OF CONTENTS

- § 20:24 Solid waste
- § 20:25 Hazardous waste/toxic materials
- § 20:26 Radioactive waste
- § 20:27 Thermal
- § 20:28 CFC's and stratospheric ozone layer protection

## V. NATURAL RESOURCES IMPACT

- § 20:29 Agriculture and pesticides (renewable) and pesticides (renewable)
- § 20:30 Aquaculture
- § 20:31 Soil depletion run-off pollution (non-renewable)/desertification process
- § 20:32 Oceans and marine coastal resources
- § 20:33 Silviculture (renewable)
- § 20:34 Oil and gas
- § 20:35 Mining: Run-off pollution, slag, restoration

## VI. LAND USE

- § 20:36 Urban/sub-urban
- § 20:37 Historic and cultural preservation
- § 20:38 Open space
- § 20:39 Transportation system: traffic and public transportation regulations
- § 20:40 Housing
- § 20:41 Noise

## VII. PUBLIC HEALTH

- § 20:42 Drinking water
- § 20:43 Food purity

## VIII. NATURE

- § 20:44 Parks/Wild areas
- § 20:45 Biological diversity
- § 20:46 Species conservation
- § 20:47 Fish
- § 20:48 Wetlands
- § 20:49 Fauna and flora

## IX. OTHERS

- § 20:50 Energy production
- § 20:51 Indigenous populations
- § 20:52 Workers protection

## X. PRACTICAL CONSIDERATIONS

- § 20:53 In general

## **XI. CONCLUSION**

§ 20:54 In general

Appendix 20A. Administrative Structure of the Secretary of  
Natural Resources and Sustainable Development  
(SRNDS)

Appendix 20B. International Treaties

Appendix 20C. Regional Treaties

## **CHAPTER 21. ENVIRONMENTAL LAW OF THE REPUBLIC OF ARMENIA—BY AIDA ISKOYAN, HEGHINE HAKHVERDYAN**

### **I. INTRODUCTION**

§ 21:1 In general

### **II. OVERVIEW OF THE LEGAL SYSTEM**

§ 21:2 Nature of the legal system

§ 21:3 Constitution

§ 21:4 —Environmental protection as a core value

§ 21:5 —The right to healthy and favorable environment

§ 21:6 Governmental structure

§ 21:7 Bodies of state administration in the field of  
environmental protection

§ 21:8 —Ministry of Nature Protection

§ 21:9 —State Environmental Inspection

§ 21:10 —Ministry of Agriculture

§ 21:11 —Ministry of Energetic Infrastructures and Natural  
Resources

§ 21:12 —Implementation Bureau of Environmental Programs

§ 21:13 Local self-governmental bodies in the environmental  
protection field

§ 21:14 The court system of the Republic of Armenia

### **III. THE SYSTEM OF ENVIRONMENTAL LEGISLATION OF THE REPUBLIC OF ARMENIA**

§ 21:15 Overview

§ 21:16 General legislation—Basics of the Environmental  
Protection Legislation of the Republic of Armenia

§ 21:17 —Environmental Impact Assessment and Expertise

§ 21:18 Sectoral legislation—Protection of land

§ 21:19 Specially Protected Nature Areas

§ 21:20 Wild fauna and flora species protection

§ 21:21 Forests

§ 21:22 Agriculture

§ 21:23 Renewable energy

## TABLE OF CONTENTS

- § 21:24 Air quality
- § 21:25 Emission trading scheme
- § 21:26 Water
- § 21:27 Waste
- § 21:28 Cultural heritage

## IV. PRACTICAL CONSIDERATIONS

- § 21:29 Finding the law
- § 21:30 Legal standing of NGOs
- § 21:31 Teghout case

## V. CONCLUSION AND BIBLIOGRAPHY

- § 21:32 Conclusion

# CHAPTER 22. ENVIRONMENTAL LAW OF AUSTRALIA—BY JOHN G. TABERNER AND SUSAN J. GIBB

## I. OVERVIEW OF THE AUSTRALIAN LEGAL SYSTEM

- § 22:1 Governmental structure
- § 22:2 Statutory, common, and other laws
- § 22:3 Relationship between national and local jurisdictions
- § 22:4 Judicial system
- § 22:5 Liability and compensation systems
- § 22:6 Trends in environmental law—Increasing use of legislation
- § 22:7 —Regulation controlling entire industries
- § 22:8 —Comprehensive legislation
- § 22:9 —Commonwealth regulation
- § 22:10 Regulatory and enforcement authorities

## II. ENVIRONMENTAL LAWS

- § 22:11 General
- § 22:12 Land-use and regional planning
- § 22:13 Development control
- § 22:14 Environmental impact assessment—Commonwealth
- § 22:15 —New South Wales and Victoria
- § 22:16 Export and import of hazardous substances
- § 22:17 Nuclear waste
- § 22:18 Use, storage, transportation, or disposal of hazardous waste
- § 22:19 Records of toxicity
- § 22:20 Pollution control
- § 22:21 Coastal waters
- § 22:22 External waters
- § 22:23 Natural, built, and cultural environment
- § 22:24 Natural resources

§ 22:25 Worker protection

### **III. PRACTICAL CONSIDERATIONS**

§ 22:26 Dealing with regulatory authorities and enforcement authorities

§ 22:27 Prosecution policy

§ 22:28 International influence

§ 22:29 Increasingly stringent penalties

§ 22:30 Increasing directors' liabilities

§ 22:31 Limitation of defenses

§ 22:32 New types of license conditions monitoring

§ 22:33 Dealing with citizens' groups

§ 22:34 Citizens' suits

### **IV. IMPACT OF ENVIRONMENTAL LAW ON BUSINESS TRANSACTIONS**

§ 22:35 In general

Appendix 22A. Core Environmental Legislation and Enforcement Authorities

## **CHAPTER 23. AUSTRALIA—PROTECTION OF NATURAL AND CULTURAL HERITAGE—BY PAUL MARTIN**

§ 23:1 Introduction

§ 23:2 An overview of Australia's environment and its governance

§ 23:3 Detailed examples of rural environmental issues

§ 23:4 Reducing the (unsustainable) use of freshwater

§ 23:5 Protecting native habitats

§ 23:6 Controlling invasive plants and animals

§ 23:7 Indigenous people's interests in nature

§ 23:8 Synthesis and conclusions

## **CHAPTER 24. ENVIRONMENTAL LAW OF AUSTRIA—BY WILLIBALD PLESSER, STEPHAN DENK, AND STEFANIE SAGHY**

### **I. INTRODUCTION**

§ 24:1 In general

### **II. AUSTRIA'S LEGAL SYSTEM: AN OVERVIEW**

§ 24:2 Governmental structure

§ 24:3 Judicial system

§ 24:4 Administration and enforcement

TABLE OF CONTENTS

**III. FUNDAMENTAL ASPECTS OF AUSTRIAN ENVIRONMENTAL LAW**

- § 24:5 Environmental policies and principles
- § 24:6 System of environmental law
- § 24:7 Environmental information

**IV. ENVIRONMENTAL PERMITS**

- § 24:8 In general
- § 24:9 The Trade Code
- § 24:10 Reporting system for accidents
- § 24:11 Federal Act on Environmental Impact Assessment
- § 24:12 Other environmental permits
- § 24:13 Legal remedies
- § 24:14 Powers of the Authority with regard to environmental permits and environmental liability

**V. CLEANUP OF WASTE SITES**

- § 24:15 Contaminated soil or water
- § 24:16 Liability and clean-up measures
- § 24:17 Preventive measures and information duties

**VI. EMISSION TRADING AND CLIMATE CHANGE**

- § 24:18 Emission trading schemes
- § 24:19 Climate change

**VII. OTHER ASPECTS OF ENVIRONMENTAL LAW**

- § 24:20 Asbestos
- § 24:21 Water law
- § 24:22 Waste management
- § 24:23 Chemicals law

**VIII. MONITORING, LIABILITIES AND ENVIRONMENTAL INSURANCE**

- § 24:24 Inspections and monitoring
- § 24:25 Environmental liabilities
- § 24:26 Criminal penalties
- § 24:27 Environmental insurance

**IX. IMPACT OF ENVIRONMENTAL LAW ON BUSINESS TRANSACTIONS**

- § 24:28 In general

Appendix 24A. List of Significant Environmental Laws and Commentaries

## **CHAPTER 25. ENVIRONMENTAL LAW OF BANGLADESH—BY ABDULLAH AL FARUQUE AND MD SAIFUL KARIM**

- § 25:1 Overview of Bangladesh and its legal system
- § 25:2 Bangladesh Constitution and the right to environment
- § 25:3 Development of environmental law
- § 25:4 Laws on conservation of forests
- § 25:5 River, water and energy law
- § 25:6 Climate change law
- § 25:7 Coastal and marine environmental law
- § 25:8 Environmental courts and judicial activism
- § 25:9 —Jurisdiction of the Special Magistrate Court
- § 25:10 —Jurisdiction of the Environment Court
- § 25:11 —Powers of the Environment Court
- § 25:12 —Investigation process
- § 25:13 —ADR by Environment Court
- § 25:14 —Weaknesses of the Environmental
- § 25:15 —The Role of Bangladesh Supreme Court
- § 25:16 Concluding remarks

## **CHAPTER 26. ENVIRONMENTAL LAW OF BELARUS**

### **I. INTRODUCTION**

- § 26:1 In general
- § 26:2 Overview of the Belarus legal system—Administrative branch
- § 26:3 —Legislative branch
- § 26:4 —Judicial branch
- § 26:5 Environmental authorities
- § 26:6 Commonwealth of Independent States
- § 26:7 International law obligations

### **II. THE FRAMEWORK OF ENVIRONMENTAL LAW**

- § 26:8 The Constitution
- § 26:9 Continued applicability of former USSR environmental laws
- § 26:10 —Air
- § 26:11 —Water
- § 26:12 —Flora and fauna
- § 26:13 —Forestry
- § 26:14 —Land
- § 26:15 —Minerals
- § 26:16 —Environmental Impact Assessment
- § 26:17 Belarus statutes

### **III. IMPLEMENTATION**

- § 26:18 Procuracy



## TABLE OF CONTENTS

- § 26:19 Public enforcement
- § 26:20 Natural resource taxes

## IV. PRACTICAL CONSIDERATIONS

- § 26:21 In general

## CHAPTER 27. ENVIRONMENTAL LAW OF THE CITY OF BERLIN—BY SONJA E. CORTERIER

- § 27:1 Introduction
- § 27:2 Berlin and federal law
- § 27:3 Urban issues
- § 27:4 —Surface sealing
- § 27:5 —Urban sprawl and land use
- § 27:6 —Air quality
- § 27:7 —Water quality—Ground water
- § 27:8 — —Surface waters
- § 27:9 —Flora
- § 27:10 —Fauna
- § 27:11 —Waste management
- § 27:12 — —Municipal waste management
- § 27:13 — —Hazardous waste management
- § 27:14 —Agriculture
- § 27:15 —Silvaculture
- § 27:16 —Energy demand
- § 27:17 —Noise pollution
- § 27:18 Other impacting laws
- § 27:19 Implementation and enforcement

## CHAPTER 28. ENVIRONMENTAL LAW OF BERMUDA

### I. OVERVIEW OF BERMUDA’S LEGAL SYSTEM

- § 28:1 In general
- § 28:2 History
- § 28:3 Government
- § 28:4 Economy
- § 28:5 Environmental conditions

### II. MAJOR LAWS AND REGULATIONS RELATING TO ENVIRONMENTAL PROTECTION

- § 28:6 Air quality
- § 28:7 —Construction permits
- § 28:8 —Operating licenses
- § 28:9 —Clean air regulations
- § 28:10 —Other enforcement regulations
- § 28:11 Wildlife conservation—The Bermuda National Trust

- § 28:12 —The National Park System
- § 28:13 Wildlife Conservation—Other Flora and Fauna  
Protection—Coral Reef Preserves Act
- § 28:14 Wildlife conservation—Other flora and fauna protection—  
Endangered Animals and Plants Act
- § 28:15 — —Protected Species Act
- § 28:16 — —Protection of Birds Act
- § 28:17 — —Care and Protection of Animals Act
- § 28:18 Land development and use
- § 28:19 Public health
- § 28:20 Water quality and conservation—Water conservation
- § 28:21 —Water pollution: The Merchant Shipping Act 2002
- § 28:22 — —Chapter I: Pollution Generally
- § 28:23 — —Chapter II: Waste Reception Facilities at Harbours
- § 28:24 — —Chapter III: Oil Pollution
- § 28:25 — —Chapter IV: Liability for Oil Pollution
- § 28:26 — —Chapter V: International Oil Pollution Compensation  
Fund
- § 28:27 Agriculture
- § 28:28 —Soil erosion
- § 28:29 —Control of plant disease and pests
- § 28:30 —Control of animal diseases
- § 28:31 Fishing

### **III. PRACTICAL CONSIDERATIONS**

- § 28:32 In general

Appendix 28A. List of Significant Environmental Laws and  
Regulations of Bermuda

## **CHAPTER 29. ENVIRONMENTAL LAW OF BHUTAN—BY ANNE MARIE GARTI**

### **I. INTRODUCTION TO BHUTAN**

- § 29:1 Geography and environment
- § 29:2 History
- § 29:3 New democratic constitutional monarchy
- § 29:4 Customary law

### **II. THE CONSTITUTION OF THE KINGDOM OF BHUTAN**

- § 29:5 In general

### **III. INTERNATIONAL OBLIGATIONS**

- § 29:6 In general

### **IV. ENVIRONMENTAL LAWS**

- § 29:7 Ownership

## TABLE OF CONTENTS

- § 29:8 —Bhutan Forest Act of 1969
- § 29:9 —Land Act of Bhutan
- § 29:10 Conservation—Forest and Nature Conservation Act of Bhutan, 1995
- § 29:11 —Biodiversity Act of Bhutan, Water Sheep Year 2003
- § 29:12 Food and farming
- § 29:13 —Food Act of Bhutan, 2005
- § 29:14 —The Cooperative (Amendment) Act of Bhutan, 2009
- § 29:15 Fundamental environmental laws—National Environmental Protection Act of 2007
- § 29:16 —Waste Prevention and Management Act of 2009
- § 29:17 —The Water Act of Bhutan, 2011
- § 29:18 —The Electricity Act of Bhutan, 2001

## V. ADAPTATION TO CLIMATE CHANGE

- § 29:19 In general

## VI. BHUTAN AS A MODEL FOR REGIONAL SUSTAINABILITY

- § 29:20 In general
- § 29:21 Gross National Happiness guides development
- § 29:22 Regional solutions for global problems
- § 29:23 Bhutan, the little country that could

## CHAPTER 30. ENVIRONMENTAL LAW OF BOTSWANA

- § 30:1 Botswana's geographical outlook
- § 30:2 Overview of the governance system of Botswana
- § 30:3 The political organization and governance structure
- § 30:4 The legal system of Botswana
- § 30:5 The Constitution of Botswana and the right to environment
- § 30:6 *Sesana v. Attorney General*
- § 30:7 *Mosetlhanyane and Another v. The Attorney General*
- § 30:8 The application of international law on the Botswana domestic scene
- § 30:9 Rules of international environmental law in Botswana
- § 30:10 The common law
- § 30:11 Botswana's Environmental Law and Management System.
- § 30:12 The Environmental Assessment Act
- § 30:13 —Conditions for operationalizing the Act
- § 30:14 —Exclusions
- § 30:15 —Main provisions of the Act
- § 30:16 —Administrative hierarchy of the Environmental Assessment Act
- § 30:17 — —The Minister
- § 30:18 — —The Departmental of Environmental Affairs

- § 30:19 — —The Environmental Assessment Board
- § 30:20 The Environmental Assessment Board—Redress
- § 30:21 —Appeals
- § 30:22 The protection, conservation, management and control of  
flora
- § 30:23 —The Forest Act
- § 30:24 —The Herbage Preservation (Prevention of Fires) Act
- § 30:25 The protection, conservation, management and control of  
fauna
- § 30:26 —The general scheme of the Act
- § 30:27 Water Resources
- § 30:28 Waste Management
- § 30:29 —Main provisions of the Act
- § 30:30 Air Quality
- § 30:31 Concluding Remarks

## **CHAPTER 31. ENVIRONMENTAL LAW OF BRAZIL—BY ELI DOS SANTOS MEDEIROS**

### **I. INTRODUCTION: ABOUT BRAZIL AND ITS LEGAL TRADITION**

- § 31:1 In general

### **II. OVERVIEW OF THE BRAZILIAN LEGAL SYSTEM**

- § 31:2 In general
- § 31:3 Constitution
- § 31:4 —Constitutional environmental issues
- § 31:5 — —An ecologically balanced environment
- § 31:6 — —Citizen standing
- § 31:7 — —Biodiversity
- § 31:8 — —Environmental impact assessment
- § 31:9 — —Environmental education
- § 31:10 — —Cultural heritage
- § 31:11 — —Miscellaneous
- § 31:12 Governmental structure
- § 31:13 —Federal government
- § 31:14 —State government
- § 31:15 —Municipal government
- § 31:16 Types of laws and hierarchy
- § 31:17 —Constitution
- § 31:18 —Amendments to the Constitution
- § 31:19 —Supplemental
- § 31:20 —Statutory laws
- § 31:21 —Delegated laws
- § 31:22 —Provisional measures
- § 31:23 —Legislative Decrees
- § 31:24 —Decrees

## TABLE OF CONTENTS

- § 31:25 —Resolutions
- § 31:26 Codification
- § 31:27 Publication
- § 31:28 Principles
- § 31:29 Power to generate legislation

### **III. INTERNATIONAL ENVIRONMENTAL AGREEMENTS**

- § 31:30 In general

### **IV. ENVIRONMENTAL LAWS**

- § 31:31 In general
- § 31:32 The National Environmental System
- § 31:33 Mechanisms and tools created by the National Environmental Policy Law
- § 31:34 Environmental Impact Assessment
- § 31:35 Administrative Law Rules
- § 31:36 —Rulemaking proceeding
- § 31:37 —Adjudication proceeding
- § 31:38 —Judicial review
- § 31:39 Integrated Coastal Zone Management
- § 31:40 Sectoral Laws
- § 31:41 —Air
- § 31:42 —Water resources
- § 31:43 —Wildlife
- § 31:44 —Forests
- § 31:45 —Industrial zoning
- § 31:46 —Pesticides
- § 31:47 —Ecological stations and environmental protected areas
- § 31:48 —Solid waste
- § 31:49 —Hazardous waste
- § 31:50 —Cultural heritage
- § 31:51 —Fishing
- § 31:52 —Land Use
- § 31:53 —Noise
- § 31:54 —Public health
- § 31:55 —Urban land, soil conservation, nuclear activity, indigenous population, mineral prospecting and mining, and agriculture

### **V. ENVIRONMENTAL IMPACTS FROM NON-ENVIRONMENTAL LAW SECTORS**

- § 31:56 In general

### **VI. GENETIC ENGINEERING**

- § 31:57 In general

## **VII. ADMINISTRATION, IMPLEMENTATION AND ENFORCEMENT OF ENVIRONMENTAL LAW**

- § 31:58 In general
- § 31:59 Crimes against the environment

## **VIII. OBSERVATIONS**

- § 31:60 In general

## **CHAPTER 32. ENVIRONMENTAL LAW OF CANADA—BY JEAN E. STATEN**

### **I. INTRODUCTION**

- § 32:1 An overview of Canada's legal system
- § 32:2 Canada's environmental legal framework—Environmental Acts: Federal
- § 32:3 —Enforcement Authorities: Federal and Provincial
- § 32:4 —Implementation of environmental laws: Provincial

### **II. THE ENVIRONMENTAL LAWS OF QUÉBEC**

- § 32:5 Sustainable development
- § 32:6 Soil conservation
- § 32:7 Protection of air
- § 32:8 —Deterioration of air quality
- § 32:9 —Depletion of the ozone layer
- § 32:10 —Acid precipitation
- § 32:11 —Climate change
- § 32:12 Protection of water—Québec's water policy: Water, our life, our future
- § 32:13 —Center of Hydrology of Québec
- § 32:14 —Regulation of wastewater
- § 32:15 Regulation of products—Agricultural products
- § 32:16 —Elimination of residual materials in Québec

### **III. ENVIRONMENTAL EMERGENCIES**

- § 32:17 In general

### **IV. ENVIRONMENTAL IMPACT ASSESSMENTS**

- § 32:18 In general

### **V. CONCLUSION**

- § 32:19 In general

## **CHAPTER 33. ENVIRONMENTAL LAW OF THE REPUBLIC OF CHILE—BY NADIA KADDOUR**

### **I. INTRODUCTION**

§ 33:1 In general

### **II. GENERAL ENVIRONMENTAL NORMS**

#### **A. INTRODUCTION TO THE TERRITORIAL, LEGISLATIVE AND JUDICIAL STRUCTURE OF CHILE**

§ 33:2 Territorial structure

§ 33:3 Legislative and judicial structures of Chile

#### **B. GENERAL RULES ON ENVIRONMENTAL NORMS IN CHILE**

§ 33:4 Environmental norms and the Constitution—Generally

§ 33:5 Primary norms and secondary norms—Saturated and  
latent areas

§ 33:6 International agreements

§ 33:7 Environmental law authorities

§ 33:8 —Ministry of the Environment

§ 33:9 —Council of Ministries for Sustainability

§ 33:10 —Creation of the Environment Assessment Service

§ 33:11 —Creation of the Superintendencia of the Environment  
("Superintendencia del Medio Ambiente")

§ 33:12 —Creation of the Environmental Tribunals

§ 33:13 — —Composition

§ 33:14 — —Subject matter jurisdiction

§ 33:15 — —Procedure

§ 33:16 — —Balance of the activity of the Environmental  
Tribunals since their implementation

§ 33:17 Principles of the Environmental Framework Law No  
19.300 of March 19, 1994 (the "Environmental  
Framework Law") and the Environmental Impact  
Assessment System

§ 33:18 —The Strategic Environmental Assessment

§ 33:19 —The Environmental Impact Assessment System

§ 33:20 —Environmental Impact Assessment System Process

§ 33:21 Environmental Monitoring

§ 33:22 Environmental Actions

§ 33:23 Management of emergency situation

### **III. NORMS ON NATURAL RESOURCES**

§ 33:24 Norms on air

§ 33:25 Norms on water

- § 33:26 Norms on Forest, Flora, Fauna
- § 33:27 Norms on minerals and mining activities
- § 33:28 Norms on energy resources

#### **IV. NORMS ON ENVIRONMENTAL ELEMENTS OTHER THAN NATURAL RESOURCES**

- § 33:29 Norms on wastes and dangerous substances
- § 33:30 Norms on noise, odors and light contamination
- § 33:31 Norms on urban planning
- § 33:32 Norms on indigenous people

#### **V. CHILE'S CLIMATE CHANGE STRATEGY**

- § 33:33 Overview
- § 33:34 Conclusion

### **CHAPTER 34. ENVIRONMENTAL LAW OF THE PEOPLE'S REPUBLIC OF CHINA—BY WANG XI, GAO QI**

#### **I. INTRODUCTION**

- § 34:1 Geography, population and economic development
- § 34:2 Political and legal structure
- § 34:3 Major environmental problems and challenges
- § 34:4 —Pollution
- § 34:5 — —Air pollution
- § 34:6 — —Water pollution
- § 34:7 — —Industrial solid wastes and household garbage
- § 34:8 — —Soil pollution
- § 34:9 —Ecological deterioration

#### **II. LEGAL AND ADMINISTRATIVE FRAMEWORK FOR ENVIRONMENTAL PROTECTION**

- § 34:10 Historical development of environmental law in china
- § 34:11 Sources of environmental law—Constitution
- § 34:12 —Treaties
- § 34:13 —Laws and regulations
- § 34:14 —Judicial interpretations
- § 34:15 Basic principles of environmental law
- § 34:16 —Sustainable development
- § 34:17 —The prevention principle and the precautionary principle
- § 34:18 —Polluter pays principle and destroyer pays principle
- § 34:19 —Public participation
- § 34:20 —*Ex ante* actions
- § 34:21 —Administrative intervention
- § 34:22 —Economic or market-based tools



## TABLE OF CONTENTS

- § 34:23 —*Ex post* responses and remedies
- § 34:24 Roles of major players in process of environmental governance—Relationships among the major players
- § 34:25 —Government
- § 34:26 —Business sector
- § 34:27 —General public
- § 34:28 —Judicial system

## III. AREAS OF ENVIRONMENTAL LAW

- § 34:29 In general
- § 34:30 Framework legislation on environmental protection
- § 34:31 Pollution prevention and control—In general
- § 34:32 —Air pollution
- § 34:33 —Water pollution
- § 34:34 —Maritime pollution
- § 34:35 —Solid waste pollution
- § 34:36 —Noise pollution
- § 34:37 —Radioactive pollution
- § 34:38 —Soil pollution
- § 34:39 Nature conservation and resources management—Water, soil and land—Water Law
- § 34:40 — —Law on Yangtze River Protection
- § 34:41 — —Law on Water and Soil Conservation
- § 34:42 — —Law on Prevention and Control of Desertification
- § 34:43 — —Land Administration Law
- § 34:44 —Nature reserves
- § 34:45 —Species conservation and bio-safety
- § 34:46 — —Wild Animals Protection Law
- § 34:47 — —Bio-safety Law
- § 34:48 — —Regulations on Protection of Wild Plants
- § 34:49 — —Regulations on Protection and Management of Wild Medical Resources
- § 34:50 — —Regulations on Safe Management of Agricultural Genetically Modified Organisms
- § 34:51 —Forest and grassland
- § 34:52 — —Forest Law
- § 34:53 — —Grassland Law
- § 34:54 —Fishery and mining—Fishery Law
- § 34:55 — —Mineral Resources Law
- § 34:56 —Marine environment
- § 34:57 — —Marine Environmental Protection Law
- § 34:58 — —Law on Sea Area Utilization
- § 34:59 — —Law on Island Protection
- § 34:60 —Nuclear Safety Law
- § 34:61 Specific Legislation—EIA Law and the Regulations on EIA of Planning
- § 34:62 —Environmental Protection Tax Law
- § 34:63 —Clean Production Promotion Law

§ 34:64 —Circular Economy Promotion Law

§ 34:65 Related Laws

Appendix 34A. Selected Bibliography

## **CHAPTER 35. ENVIRONMENTAL LAW OF CHINA—TAIWAN—BY RIYAZ G. BHIMANI**

§ 35:1 Introduction

§ 35:2 Environmental issues

§ 35:3 Taiwan's legal tradition

§ 35:4 Taiwan's environmental law—Internal framework of environmental regulation

§ 35:5 —Sectoral laws—Water pollution

§ 35:6 — —Air pollution

§ 35:7 — —Solid waste and recycling

§ 35:8 — —Soil and ground water pollution remediation

§ 35:9 — —Drinking water

§ 35:10 — —Toxic substances

§ 35:11 — —Others

§ 35:12 —Establishment of oversight agencies

§ 35:13 —National administration through lower level administration

§ 35:14 —Implementation, administration, and enforcement

§ 35:15 Environmental Impact Assessment Laws

§ 35:16 International environmental participation

§ 35:17 Future environmental issues

§ 35:18 Analysis after survey

§ 35:19 Conclusion

## **CHAPTER 36. ENVIRONMENTAL LAW OF THE DEMOCRATIC REPUBLIC OF CONGO—BY DR KENNEDY KIHANGI BINDU**

### **I. INTRODUCTION**

§ 36:1 In general

### **II. OVERVIEW OF THE DEMOCRATIC REPUBLIC OF CONGO'S LEGAL SYSTEM**

§ 36:2 The Constitution of the Democratic Republic of Congo

§ 36:3 The Colonial Charter of 1908

§ 36:4 The Fundamental Law of 1960

§ 36:5 The Constitution of 1964

§ 36:6 The Constitution of 1967

§ 36:7 The Constitutional Decree of 28 May 1997

§ 36:8 The Transitional Constitution of 2003

§ 36:9 The Constitution of 18 February 2006 modified by the law N° 11/002 of 20 January 2011

## TABLE OF CONTENTS

### **III. THE INTERNATIONAL ENVIRONMENTAL LAW OBLIGATIONS OF THE DEMOCRATIC REPUBLIC OF CONGO IN TREATIES**

- § 36:10 In general
- § 36:11 Treaties ratified by the Democratic Republic of Congo in environmental matters (french version)

### **IV. THE NATIONAL ENVIRONMENTAL FRAMEWORK AND THE ENVIRONMENTAL IMPACT ASSESSMENT CROSS-CUTTING LEGISLATION**

- § 36:12 In general
- § 36:13 The Law N° 11/009 of 9 July 2011
- § 36:14 The Law N° 14/003 of 11 February 2014
- § 36:15 The Law N° 15/012 of 1 August 2015
- § 36:16 The Law N° 11/022 of 24 December 2011
- § 36:17 The Mining Code and the Decree N° 038/2003 of 26 March 2003
- § 36:18 Public participation
- § 36:19 The Law N° 11-2002 of 29 August 2002
- § 36:20 Environment Impact Assessment procedure

### **V. ADMINISTRATIVE ENVIRONMENTAL MANAGEMENT**

- § 36:21 In general
- § 36:22 Extensive powers
- § 36:23 Powers to legislate and authorize specific performance
- § 36:24 Powers to execute
- § 36:25 Limitations on powers
- § 36:26 Administrative appeal

### **VI. OVERVIEW ON THE NATIONAL SECTORAL LEGISLATION**

- § 36:27 In general
- § 36:28 Energy supply and water resources
- § 36:29 REDD+
- § 36:30 Fisheries
- § 36:31 Agriculture and land management

### **VII. CONCLUSION**

- § 36:32 In general

## **CHAPTER 37. ENVIRONMENTAL LAW OF COSTA RICA—BY RAPHAEL SANTOS**

### **I. INTRODUCTION**

- § 37:1 In general

## II. OVERVIEW OF COSTA RICA'S LEGAL SYSTEM

- § 37:2 Government structure
- § 37:3 Types of laws
- § 37:4 The Constitution
- § 37:5 The judicial system
- § 37:6 Other mechanisms—The Defender of the Inhabitants of the Republic

## III. ENVIRONMENTAL LAWS

- § 37:7 Environmental trends
- § 37:8 Costa Rica's relevant environmental institutions
- § 37:9 Organic Law for the Environment
- § 37:10 —Citizen participation
- § 37:11 —Education and investigation
- § 37:12 —Environmental impact
- § 37:13 —Protected wild areas (areas silvestres protegidas)
- § 37:14 —Marine, coastal and wetland resources (recursos marinos, costeros y humedales)
- § 37:15 —Bio-diversity (diversidad biológica)
- § 37:16 —Forest resources
- § 37:17 —Air and water
- § 37:18 —Soil
- § 37:19 —Energy resources
- § 37:20 —Contamination
- § 37:21 Natural resources—Water legislation
- § 37:22 — —Water Law
- § 37:23 —Mining legislation
- § 37:24 —Hydrocarbons Law
- § 37:25 —Territorial waters and fishing rights
- § 37:26 — —Marine hunting and fishing
- § 37:27 —Terrestrial maritime zone
- § 37:28 —Wildlife Conservation Law
- § 37:29 — —Administration
- § 37:30 — —Finance
- § 37:31 — —Community participation
- § 37:32 — —Management and development
- § 37:33 — —Hunting and fishing
- § 37:34 — —Other types of management
- § 37:35 — —Wildlife refuges
- § 37:36 — —Criminal sanctions
- § 37:37 —Forestry Law
- § 37:38 —National Parks Law
- § 37:39 —Agrarian legislation—Land and Settlement Law
- § 37:40 — —Law for the Creation of the National Groundwater, Irrigation and Drainage Service
- § 37:41 Energy
- § 37:42 Manufacturing and pollution—General Health Law
- § 37:43 —Animal Health Law

## TABLE OF CONTENTS

- § 37:44 —Vegetable Sanitation Law
- § 37:45 —Pesticides legislation
- § 37:46 —Regulation of Registration and Control of Toxic or Dangerous Substances, Products or Objects
- § 37:47 Cultural heritage—Archaeological National Patrimony Law

## IV. CONCLUSION

- § 37:48 In general

# CHAPTER 38. ENVIRONMENTAL LAW OF CUBA—BY PATRICK BROSNAN

## I. INTRODUCTION

- § 38:1 Overview

## II. BACKGROUND

- § 38:2 In general
- § 38:3 Pre-Cuban Revolution
- § 38:4 The Cuban Revolution
- § 38:5 Transformation of the legal system
- § 38:6 Environmental legal tradition
- § 38:7 Political considerations of environmental policy

## III. CUBAN CONSTITUTION

- § 38:8 Structure of governance
- § 38:9 Judicial system
- § 38:10 Role of the Communist Party

## IV. INTERNATIONAL RELATIONS AND ENVIRONMENTAL LAW IN CUBA

- § 38:11 International agreements
- § 38:12 Rio Declaration and the 1992 Constitutional Amendments
- § 38:13 Evolution of environmental law and creation of CITMA

## V. LAW 81

- § 38:14 In general
- § 38:15 Environmental Impact Assessment (EIA)
- § 38:16 Administrative penalties
- § 38:17 Judicial access and review
- § 38:18 Public participation

## VI. SPECIFIC AREAS OF ENVIRONMENTAL PROTECTION

- § 38:19 In general

- § 38:20 Forestry
- § 38:21 Biological diversity
- § 38:22 Biosafety
- § 38:23 Hazardous waste

## **VII. CLIMATE CHANGE**

- § 38:24 Specific threats
- § 38:25 Policy

## **VIII. CHALLENGES AND DEVELOPMENT**

- § 38:26 Economic reforms

# **CHAPTER 39. ENVIRONMENTAL LAW OF THE CZECH REPUBLIC—BY PROF. JUDR. MILAN DAMOHORSKÝ, DRSC.**

## **I. INTRODUCTION**

- § 39:1 In general

## **II. OVERVIEW OF THE LEGAL SYSTEM**

- § 39:2 Nature of the legal system
- § 39:3 Constitutional basis of environmental protection in the Czech Republic
- § 39:4 Governmental structure of the Czech Republic
- § 39:5 State administration bodies in the field of environmental protection
  - Ministry of the Environment
- § 39:6 —Ministry of Agriculture and other bodies of state administration in the field of environmental protection
- § 39:7 —Czech Environmental Inspectorate
- § 39:8 —National Parks Authorities in the Czech Republic
- § 39:9 —Nature Conservation Agency of the Czech Republic
- § 39:10 —State Environmental Fund of the Czech Republic
- § 39:11 —State administration bodies in the field of environmental protection at the regional and local level
- § 39:12 —Judicial branch

## **III. ENVIRONMENTAL LAW SYSTEM IN THE CZECH REPUBLIC**

- § 39:14 Overview
- § 39:15 General part of environmental law
- § 39:16 Special part of environmental law
- § 39:17 Nature and landscape conservation
- § 39:18 Specially protected areas
- § 39:19 Special protection of wild fauna and flora species

## TABLE OF CONTENTS

- § 39:20 Protection of forests
- § 39:21 Protection of land and agriculture
- § 39:22 Renewable sources of energy
- § 39:23 Protection of air
- § 39:24 Protection of climate and Earth's ozone layer
- § 39:25 Water protection
- § 39:26 Waste management and protection against other sources of danger
- § 39:27 Natural and cultural heritage

## IV. PRACTICAL CONSIDERATIONS

- § 39:28 Databases of legal rules and availability of information
- § 39:29 Associations (formerly civic associations, NGOs)
- § 39:30 Right to a favorable environment and its constitutional anchoring
- § 39:31 Legal responsibility in the protection of the environment

## V. CONCLUSION AND BIBLIOGRAPHY

- § 39:32 Conclusion
- § 39:33 Literature

# CHAPTER 40. ENVIRONMENTAL LAW OF DENMARK—BY ELLEN MARGRETHE BASSE

## I. INTRODUCTION

- § 40:1 In general

## II. DENMARK'S LEGAL SYSTEM: AN OVERVIEW

- § 40:2 Denmark's governmental structure
- § 40:3 The judicial system
- § 40:4 The administrative structure

## III. FUNDAMENTAL ASPECTS OF DENMARK'S ENVIRONMENTAL LAW

- § 40:5 The European Union's environmental competences, policies and principles
- § 40:6 Denmark's environmental policies and general principles
- § 40:7 The system of environmental law
- § 40:8 Environmental information

## IV. ENVIRONMENTAL PERMITS

- § 40:9 The Environmental Protection Act
- § 40:10 The Act on Environmental Approval for Livestock Holdings
- § 40:11 Reporting system for accidents
- § 40:12 Environmental Impact Assessment

- § 40:13 Legal remedies
- § 40:14 Powers of the authorities with regard to inspection

## **V. CLEANING UP OF CONTAMINATED SITES**

- § 40:15 Contaminated soil, groundwater or water
- § 40:16 Responsibility and clean-up measures
- § 40:17 Preventive measures and information duties

## **VI. EMISSION TRADING AND CLIMATE CHANGE**

- § 40:18 Emission trading schemes
- § 40:19 Climate change and renewable energy

## **VII. OTHER ASPECTS OF ENVIRONMENTAL LAW**

- § 40:20 Water law
- § 40:21 Costal areas, floods, and sea management law
- § 40:22 Waste management
- § 40:23 Chemical law

## **VIII. MONITORING, LIABILITIES AND ENVIRONMENTAL INSURANCE**

- § 40:24 Inspections and monitoring
- § 40:25 Liability for environmental damages
- § 40:26 Criminal penalties
- § 40:27 Environmental insurance

## **IX. IMPACT OF ENVIRONMENTAL LAW ON BUSINESS TRANSACTIONS**

- § 40:28 In general
- Appendix 40A. List of significant Environmental Laws and Commentaries

# **CHAPTER 41. ENVIRONMENTAL LAW OF ECUADOR—BY MARIA ANTONIA TIGRE**

## **I. INTRODUCTION**

- § 41:1 Introduction to Ecuador
- § 41:2 National history
- § 41:3 Organization of territory
- § 41:4 Economy
- § 41:5 International relations
- § 41:6 Historical context of the legal system

## **II. THE ENVIRONMENT IN ECUADOR**

- § 41:7 Biodiversity



## TABLE OF CONTENTS

- § 41:8 Different regions, ecosystems and environmental concerns
- § 41:9 —*La Sierra* (highlands)
- § 41:10 —*El Oriente*
- § 41:11 —The coast
- § 41:12 —Galapagos Islands

## III. STATE STRUCTURE AND ORGANIZATION

- § 41:13 In general
- § 41:14 The executive branch
- § 41:15 —The Office of the President
- § 41:16 —Ministries of State
- § 41:17 — —Ministry of the Environment
- § 41:18 —Public force
- § 41:19 —Decentralized system of environmental management
- § 41:20 The legislative branch
- § 41:21 —Sources of law and how laws are made
- § 41:22 The judicial branch
- § 41:23 —National Court of Justice
- § 41:24 —Judiciary Council
- § 41:25 —Constitutional Court
- § 41:26 —Provincial courts of justice
- § 41:27 —Independent bodies: Attorney for the Defense of the People, Attorney General, Office of the State Prosecutor
- § 41:28 —Indigenous justice
- § 41:29 —Justices of peace
- § 41:30 —Alternative means of dispute settlement
- § 41:31 Transparency and social control branch
- § 41:32 Electoral branch

## IV. THE CONSTITUTION

- § 41:33 Historical context and approval
- § 41:34 Historical development of environmental constitutional provisions
- § 41:35 —1983 constitutional reform to the 1978 Constitution of the Republic of Ecuador
- § 41:36 —1996 constitutional reform to the 1979 Constitution of the Republic of Ecuador
- § 41:37 —1998 Constitution of the Republic of Ecuador
- § 41:38 —2008 Constitution of the Republic of Ecuador
- § 41:39 Environmental values, or, what it means to have a right of nature
- § 41:40 —Case law

## V. INTERNATIONAL OBLIGATIONS: ENVIRONMENTAL AGREEMENTS

- § 41:41 In general
- § 41:42 General MEAs within the United Nations framework

## **VI. NATIONAL ENVIRONMENTAL LAWS**

- § 41:43 Development of environmental legislation
- § 41:44 Sectoral statutes—Environmental impact assessment
- § 41:45 —Water
- § 41:46 —Biodiversity and protected areas
- § 41:47 —Pollution prevention
- § 41:48 Special industry regulations: strategic sectors
- § 41:49 —Energy
- § 41:50 —Mining
- § 41:51 —Oil
- § 41:52 — —The Chevron case

## **VII. SPECIAL REGULATION OF PROTECTED AREAS**

- § 41:53 The Galapagos Islands
- § 41:54 The Amazon rainforest
- § 41:55 —The Yasuni ITT initiative

## **VIII. CLIMATE CHANGE**

- § 41:56 In general

## **IX. CONCLUSION**

- § 41:57 In general

# **CHAPTER 42. ENVIRONMENTAL LAW OF THE EUROPEAN UNION—BY TREVOR ADAMS**

## **I. OVERVIEW OF THE EC CONSTITUTION**

- § 42:1 The Communities
- § 42:2 The institutions
- § 42:3 —The Commission
- § 42:4 —The Council of the European Communities
- § 42:5 —The European Council
- § 42:6 —The European Parliament
- § 42:7 —The Economic and Social Committee
- § 42:8 —The Committee of the Regions
- § 42:9 —The European Court of Justice (ECJ)
- § 42:10 Single European Act and Treaty on European Union
- § 42:11 —Article 100A
- § 42:12 —Environmental provisions
- § 42:13 Agreement on the European Economic Area
- § 42:14 Enlargement of the EC
- § 42:15 Community law and the member states
- § 42:16 —Regulations
- § 42:17 —Directives
- § 42:18 —Decisions

## TABLE OF CONTENTS

- § 42:19 —Rights of individuals
- § 42:20 —Constitutional basis
- § 42:21 Action Programs on the Environment
- § 42:22 Approaches to environmental control
- § 42:23 —Freedom of information
- § 42:24 —European Environment Agency
- § 42:25 —Eco-audits and eco-labelling
- § 42:26 —Environmental agreements

## II. SPECIFIC ASPECTS OF ENVIRONMENTAL CONTROL

- § 42:27 Waste
- § 42:28 —Hazardous wastes
- § 42:29 —International shipments of hazardous waste
- § 42:30 —PCBs
- § 42:31 —Waste oils
- § 42:32 —Sewage sludge
- § 42:33 —Liability for waste
- § 42:34 —Recycling of waste
- § 42:35 Climate change
- § 42:36 Air pollution
- § 42:37 —General air quality
- § 42:38 —Exhaust emissions from vehicles
- § 42:39 —Industrial plants
- § 42:40 —CFCs
- § 42:41 —Volatile organic compounds
- § 42:42 Water pollution
- § 42:43 —Discharges of dangerous substances to water
- § 42:44 —Directives relating to specific industries
- § 42:45 —Quality objectives for water intended for specific uses
- § 42:46 —Protection of groundwater
- § 42:47 —International agreements
- § 42:48 Dangerous substances
- § 42:49 —Classifications, packaging, and labelling
- § 42:50 —Restrictions on marketing and use
- § 42:51 —Asbestos
- § 42:52 —Cadmium and other heavy metals
- § 42:53 Pesticides
- § 42:54 —Pesticide residues
- § 42:55 —Restrictions and labelling
- § 42:56 Noise
- § 42:57 Land-use requirements
- § 42:58 —Hazardous installations
- § 42:59 —Environmental Impact Assessments
- § 42:60 Health and safety of workers
- § 42:61 —Framework and daughter directives
- § 42:62 —Other health and safety provisions
- § 42:63 Biotechnology

### **III. FUTURE DEVELOPMENTS**

§ 42:64 In general

Appendix 42A. Principal Items of Legislation

Appendix 42B. EC Regulation 842/2006

Appendix 42C. EC Regulation 1013/2006

Appendix 42D. EC Regulation 614/2007

Appendix 42E. Directive 2008/1/EC

Appendix 42F. Directive 2008/50/EC

Appendix 42G. Directive 2008/105/EC

Appendix 42H. Decision No. 406/2009/EC

Appendix 42I. EC Regulation 443/2009

Appendix 42J. EC Regulation 1005/2009

Appendix 42K. EC Regulation 66/2010

## **CHAPTER 43. ETHIOPIA STATE REPORT: COMPARATIVE ENVIRONMENTAL LAW AND REGULATION—BY TSEGAI BERHANE GHEBRETEKLE (PHD) AND DEGINET WOTANGO DOYISO**

### **I. INTRODUCTION**

§ 43:1 Introduction

### **II. THE ETHIOPIAN STATE, ITS PEOPLE AND ECONOMY**

§ 43:2 Geography and Landscape—Ethiopia a land of  
environmental contrast

§ 43:3 History, the people and their linguistic diversity

§ 43:4 The economy

§ 43:5 Major environmental problems

§ 43:6 Deforestation

§ 43:7 Water scarcity

§ 43:8 Soil erosion

§ 43:9 Climate change

### **III. OVERVIEW OF THE ETHIOPIAN LEGAL SYSTEM**

§ 43:10 Brief history of the Ethiopian legal system

§ 43:11 Before the codification process

§ 43:12 The codification of Ethiopian modern laws

§ 43:13 The current administrative structure

§ 43:14 The Federal legislature

§ 43:15 The Federal executive

## TABLE OF CONTENTS

- § 43:16 Regional state structure
- § 43:17 The judiciary
- § 43:18 The legal profession

## **IV. INTRODUCTION TO ETHIOPIAN ENVIRONMENTAL LAW REGIME**

- § 43:19 The evolution of environmental Law in Ethiopia
- § 43:20 The Constitutional right to clean and healthy environment
- § 43:21 The Environmental Policy of Ethiopia (EPE)
- § 43:22 Administration of the policy
- § 43:23 Integration
- § 43:24 Liability, standing and judicial remedies
- § 43:25 Ethiopia's commitment under international Law

## **V. THE ENVIRONMENTAL LAWS OF ETHIOPIA**

- § 43:26 Introduction
- § 43:27 Land use
- § 43:28 Forest & soil conservation
- § 43:29 Water conservation
- § 43:30 Pollution control
- § 43:31 Wild life conservation
- § 43:32 Air quality
- § 43:33 Climate change
- § 43:34 Waste management
- § 43:35 Control of pesticides and hazardous substances
- § 43:36 Radiation control
- § 43:37 Mineral extraction
- § 43:38 Energy use and production
- § 43:39 Genetic resources
- § 43:40 Noise control
- § 43:41 Cultural heritage
- § 43:42 Other laws relating to the environment

## **VI. CONCLUSION**

- § 43:43 Conclusion

## **CHAPTER 44. ENVIRONMENTAL LAW OF FIJI—BY JASON INSDORF**

- § 44:1 Brief background on Fiji
- § 44:2 State of Fiji's environment
- § 44:3 Overview of the Fijian legal system
- § 44:4 The Department of the Environment
- § 44:5 Constitutional provisions and customary law
- § 44:6 National government
- § 44:7 Departmental governments
- § 44:8 Local government

- § 44:9 Characteristics of the Fijian legal system
- § 44:10 Environmental laws—Air pollution
- § 44:11 —Protection of fresh water and drinking water
- § 44:12 —Marine environment
- § 44:13 —Fish and fisheries legislation
- § 44:14 —Regulation of waste disposal
- § 44:15 —Protection of endangered species
- § 44:16 —Environmental Management Bill of 2004
- § 44:17 Work with SPREP
- § 44:18 International treaties
- § 44:19 Recommendations
- § 44:20 Climate change

## **CHAPTER 45. ENVIRONMENTAL LAW OF FINLAND—BY BORGSTRÖM, SUVI AND KOIVUROVA TIMO**

### **I. INTRODUCTION**

- § 45:1 In general

### **II. DEVELOPMENT AND FUNDAMENTAL ASPECTS OF ENVIRONMENTAL LAW**

- § 45:2 Historical background
- § 45:3 Constitutional provisions
- § 45:4 Instruments of environmental law and policy

### **III. LEGAL SYSTEM**

- § 45:5 Structure and role of governmental and administrative institutions
- § 45:6 Court system
- § 45:7 Access to justice
- § 45:8 Criminal matters

### **IV. ENVIRONMENTAL LEGISLATION**

- § 45:9 Pollution control
- § 45:10 —The integrated pollution control system under the Environmental Protection Act
- § 45:11 — —Criteria for the necessity of an environmental permit
- § 45:12 — —Permit procedure
- § 45:13 — —Permit consideration and the permit conditions
- § 45:14 — —Compensations
- § 45:15 — —Validity and the review of the permits
- § 45:16 Legislation on waste
- § 45:17 —General obligations and principles under the Waste Act
- § 45:18 —Organization of the waste management according to the Waste Act

## TABLE OF CONTENTS

§ 45:19	—Ban on littering
§ 45:20	—Municipal waste charges
§ 45:21	—Waste planning
§ 45:22	Legislation on chemicals and other dangerous substances
§ 45:23	—Classification, labeling and packaging of chemicals
§ 45:24	—Providing information on chemicals
§ 45:25	—Notification and registration
§ 45:26	—Authorization
§ 45:27	—Restrictions concerning the manufacturing, using, placing on the market and exporting and importing of certain substances
§ 45:28	Nature conservation—Regulatory instruments used in nature conservation
§ 45:29	—Protected areas
§ 45:30	—Natura 2000 network
§ 45:31	—Habitats protection
§ 45:32	—Species protection
§ 45:33	—Preventing the spread of the invasive alien species
§ 45:34	—Restrictions on species trade
§ 45:35	—Compensations based on nature conservation regulations
§ 45:36	Management of natural resources—Forests
§ 45:37	—Management of water and marine resources environment
§ 45:38	— —Legislation on management of water and marine resources
§ 45:39	— —Permit system for water resources management projects under the Water Act
§ 45:40	—Soil and minerals
§ 45:41	— —Soil excavation
§ 45:42	— —Mining
§ 45:43	—Fish resources—Fishing rights
§ 45:44	— —Safeguarding of fish resources
§ 45:45	—Game management and hunting
§ 45:46	Land use planning and building—Legislation on land use and building
§ 45:47	—General system of land use planning
§ 45:48	—Permits related to land use and building
§ 45:49	—Preserving built heritage and cultural landscapes
§ 45:50	Climate change and energy—National and EU climate policy
§ 45:51	—Finnish Climate Change Act
§ 45:52	—Renewable energy
§ 45:53	—Energy efficiency
§ 45:54	Environmental impact assessment
§ 45:55	Environmental liability

## V. CONCLUSION

§ 45:56	Concluding remarks
---------	--------------------

## Volume 2

### CHAPTER 46. ENVIRONMENTAL LAW OF FRANCE—BY IVANO ALOGNA

#### I. INTRODUCTION

- § 46:1 In general
- § 46:2 Public and private actors in environmental protection
- § 46:3 —National institutions
- § 46:4 —Local institutions
- § 46:5 —Organizations for the protection of the environment
- § 46:6 Sources of environmental law
- § 46:7 —The Environmental Code
- § 46:8 —The Charter for the Environment
- § 46:9 —European legal sources
- § 46:10 —International legal sources
- § 46:11 Principles of environmental law

#### II. PROTECTION OF NATURE

- § 46:12 In general
- § 46:13 Natural species
- § 46:14 —Biological diversity
- § 46:15 —Protected species
- § 46:16 —Hunting
- § 46:17 —Fishing
- § 46:18 Natural areas
- § 46:19 Natural species—Nature reserves
- § 46:20 —Natural parks
- § 46:21 —Forest
- § 46:22 —Mountain
- § 46:23 —Coastal and marine environment

#### III. POLLUTION ABATEMENT AND CONTROL

- § 46:24 In general
- § 46:25 Protection of environmental media
- § 46:26 —Water
- § 46:27 —Air
- § 46:28 —Soil
- § 46:29 Pollution and nuisance
- § 46:30 —Classified installations
- § 46:31 —Nuclear
- § 46:32 —Genetically Modified Organisms
- § 46:33 —Waste
- § 46:34 —Noise

#### IV. SANCTIONS AND LIABILITY

- § 46:35 In general



## TABLE OF CONTENTS

- § 46:36 Criminal sanctions
- § 46:37 Administrative sanctions
- § 46:38 Environmental liability

## **CHAPTER 47. ENVIRONMENTAL LAW OF GEORGIA—BY EKATERINE OTARASHVILI, LL.M**

- § 47:1 Introduction
- § 47:2 Overview of Georgian legal system—State structure
- § 47:3 —Parliament
- § 47:4 —Government
- § 47:5 —Judiciary
- § 47:6 —Hierarchy of normative acts of Georgia
- § 47:7 Harmonization of the Georgian environmental legislation with EU legislation
- § 47:8 Main principles of national environmental policy of Georgia
- § 47:9 —Water
- § 47:10 —Black Sea
- § 47:11 —Air
- § 47:12 —Biodiversity, protected areas
- § 47:13 —Hazardous waste
- § 47:14 —Environmental impact assessment
- § 47:15 Information accessibility/Aarhus Convention
- § 47:16 International agreements

## **CHAPTER 48. ENVIRONMENTAL LAW OF THE FEDERAL REPUBLIC OF GERMANY—BY EMMA SHENSHER AND MORITZ RÖHRS**

### **I. INTRODUCTION TO THE GERMAN LEGAL SYSTEM**

- § 48:1 Legislation
- § 48:2 Administration and enforcement of law
- § 48:3 Judicial system
- § 48:4 Germany and the European Union
- § 48:5 Environmental law in the German legal system
- § 48:6 Legal protection in environmental law
- § 48:7 Legal standing
- § 48:8 Legal protection against planning
- § 48:9 Preliminary legal protection
- § 48:10 Judicial review

### **II. FUNDAMENTAL ASPECTS OF GERMAN ENVIRONMENTAL LAW**

- § 48:11 General principles of environmental law
- § 48:12 Precautionary principle

- § 48:13 Polluter-pays principle
- § 48:14 Burden-sharing principle
- § 48:15 Cooperation principle
- § 48:16 Integration principle
- § 48:17 Principles of international and union law
- § 48:18 Instruments of environmental law
- § 48:19 Planning instruments
- § 48:20 Environmental planning
- § 48:21 Plan approval procedure
- § 48:22 Location planning
- § 48:23 Environmental impact assessment and strategic  
environmental assessment
- § 48:24 Scope
- § 48:25 Carrying out the environmental impact assessment
- § 48:26 Considering the evaluation of the environmental impact  
assessment or strategic environmental assessment
- § 48:27 Questions of competence
- § 48:28 Instruments of direct behavior management
- § 48:29 Duties to notify and duties to register
- § 48:30 Permits and exemptions
- § 48:31 Interventions and supervision
- § 48:32 Environmental duties
- § 48:33 Instruments of indirect behavior management
- § 48:34 State environmental information
- § 48:35 Information access rights of citizens
- § 48:36 New economic instruments
- § 48:37 Environmental charge
- § 48:38 Environmental charges under European law
- § 48:39 Federal environmental levies
- § 48:40 Environmental charges under state (Bundesland) Law
- § 48:41 Environmental subsidies
- § 48:42 Environmental agreements, target settings, and mediation  
processes
- § 48:43 Instruments of environment-related business organization
- § 48:44 Environmental Compliance Officer
- § 48:45 Environmental certification and audits
- § 48:46 Disclosure of business organization and environment-  
related business information
- § 48:47 Self-management, asset management, and state  
procurement
- § 48:48 Instruments of private law

### **III. SPECIFIC STATUTORY LAW AND REGULATIONS IN SELECTED AREAS**

- § 48:49 Emission control
- § 48:50 Industrial plants
- § 48:51 Transportation sector
- § 48:52 Waste

## TABLE OF CONTENTS

- § 48:53 Nature and landscapes
- § 48:54 Landscape planning
- § 48:55 Protection of nature and landscapes
- § 48:56 Protection of species
- § 48:57 Legal protection
- § 48:58 Soil
- § 48:59 Nuclear energy
- § 48:60 License requirement for nuclear plants
- § 48:61 Disposal of nuclear waste
- § 48:62 Liability
- § 48:63 Related aspects from energy law
- § 48:64 Climate protection

Appendix 48A. List of Significant Environmental Laws (in alphabetical order)

## CHAPTER 49. ENVIRONMENTAL LAW OF GHANA

### I. INTRODUCTION

- § 49:1 In general

### II. OVERVIEW OF GHANA'S LEGAL SYSTEM

- § 49:2 Ghana's natural resource endowment—Forestry
- § 49:3 —Hard rock minerals
- § 49:4 —Petroleum
- § 49:5 —Water resources
- § 49:6 —Fisheries
- § 49:7 Ghana legal system—Common law origin
- § 49:8 —Hierarchy of norms
- § 49:9 —Pluralistic legal system
- § 49:10 Ghana's constitutional framework in relation to the environment—Constitutional era
- § 49:11 —Military rule
- § 49:12 Structure of government—Unitary system
- § 49:13 The executive
- § 49:14 —Ministries, departments, and agencies performing environmental regulatory functions
- § 49:15 The legislature—Parliamentary oversight/Select committees
- § 49:16 The judiciary—Overview and structure of the courts
- § 49:17 —Environmental adjudication and public interest environmental litigation
- § 49:18 — —Centre for Public Interest Law v. Environmental Protection Agency, Minerals Commission and Bonte Gold Mines
- § 49:19 — —Centre for Public Interest Law v. Tema Oil Refinery
- § 49:20 — —Conclusion

### **III. GHANA'S INTERNATIONAL ENVIRONMENTAL OBLIGATIONS**

- § 49:21 Overview—Ratification and incorporation of international agreements
- § 49:22 Key international environmental treaties
- § 49:23 —African (Algiers) Convention on the Conservation of Nature and Natural Resources, 2003
- § 49:24 —United Nations Convention on the Law of the Sea and the Convention for Cooperation in Protection and Development of the Marine and Coastal Environment of the West and Central African Region
- § 49:25 —United Nations Framework Convention on Climate Change
- § 49:26 —Convention on Biological Diversity
- § 49:27 —African Charter on Human and Peoples' Rights (Banjul Charter)
- § 49:28 —Conclusion

### **IV. GHANA'S ENVIRONMENTAL LAW SYSTEM**

- § 49:29 In general
- § 49:30 Constitution
- § 49:31 The Environmental Protection Agency Act and the Environmental (Protection) Regulation
- § 49:32 Sectoral regulation—Forestry
- § 49:33 —Hard minerals
- § 49:34 —Petroleum
- § 49:35 —Water resources
- § 49:36 —Fisheries
- § 49:37 —Renewable energy
- § 49:38 —Waste management

### **V. SIGNIFICANT EMERGING ISSUES IN ENVIRONMENTAL GOVERNANCE IN GHANA**

- § 49:39 Constitutional reform
- § 49:40 —Right to a clean and healthy environment
- § 49:41 —Environmental criminal responsibility
- § 49:42 Environmental law and tort law
- § 49:43 Alternative Dispute Resolution and the environment
- § 49:44 Electronic waste

### **VI. CONCLUSION**

- § 49:45 In general

## **CHAPTER 50. ENVIRONMENTAL LAW OF GUYANA—BY JOHN P. FURNARI**

- § 50:1 Introduction

## TABLE OF CONTENTS

§ 50:2	Background on Guyana—The people and the land
§ 50:3	—The history of Guyana
§ 50:4	International and regional influences on Guyana’s environmental policy
§ 50:5	—The United Nations Convention on Law of the Sea
§ 50:6	—The Biodiversity Treaties: CITES and UNCED
§ 50:7	—International Tropical Timber Agreements of 1983 and 1996
§ 50:8	—Convention Concerning the Protection of the World Cultural and Natural Heritage
§ 50:9	—Future international obligations
§ 50:10	—Regional agreements and the CARICOM Lesson
§ 50:11	—UN support and the Iwokrama International Rain Forest Programme
§ 50:12	Guyana environmental policy—The Guyanese Constitution
§ 50:13	—The development of Guyana’s environmental policy
§ 50:14	— —National Forest Action Plan of 1989 (NFAP)
§ 50:15	— —National Environmental Action Plan
§ 50:16	— —National Development Strategy
§ 50:17	— —National Forest Policy of 1997 (NFP)
§ 50:18	Guyana environmental law
§ 50:19	—The EPA of 1996 and the role of the Agency
§ 50:20	— —Agency administration
§ 50:21	— —Agency functions
§ 50:22	— —Mandatory and discretionary duties
§ 50:23	— —Mandatory application of environmental management principles
§ 50:24	— —Deference to authority of the Agency
§ 50:25	— —Environmental Impact Assessments
§ 50:26	— —Pollution prevention and control
§ 50:27	— —Financial assurance
§ 50:28	— —Monitoring, investigations, prosecutions, civil proceedings
§ 50:29	— —Environmental Trust Fund and finances
§ 50:30	— —Miscellaneous powers of the Minister to regulate
§ 50:31	—The Forest Act
§ 50:32	— —Timber leases
§ 50:33	— —Investigation and enforcement of royalties and fines
§ 50:34	— —Forest Regulations
§ 50:35	—The Mining Act
§ 50:36	—The Petroleum Act
§ 50:37	—The National Trust Act
§ 50:38	—National Parks and Protected Areas Legislation
§ 50:39	—Wildlife legislation
§ 50:40	Conclusion
Appendix 50A.	Other Laws Relating to the Environment
Appendix 50B.	Guyana Environmental Protection Act Chapter 20:05

## **CHAPTER 51. ENVIRONMENTAL LAW OF HONDURAS—BY ELAINE HSIAO**

- § 51:1 Background information
- § 51:2 Foundations of a legal framework for environmental protection
- § 51:3 Environmental legislation by sector
- § 51:4 —Natural resources management
- § 51:5 —Forest conservation in Honduras
- § 51:6 —Water conservation in Honduras
- § 51:7 —Protected areas
- § 51:8 —Biodiversity
- § 51:9 —Environmental Impact Assessments
- § 51:10 International law and environmental treaties
- § 51:11 —Regional conventions
- § 51:12 —Regional institutions
- § 51:13 Additional sources of information

## **CHAPTER 52. ENVIRONMENTAL LAW OF HUNGARY—BY ILONA COYLE, J.D.**

### **I. INTRODUCTION**

- § 52:1 In general

### **II. BACKGROUND**

- § 52:2 History
- § 52:3 Sources of law and functioning of Hungarian government
- § 52:4 Governmental Roles in the Implementation of Environmental Law

### **III. BASIC PRINCIPLES**

- § 52:5 Constitutional right to the environment
- § 52:6 Basic principles within the Hungarian Act LIII of 1995

### **IV. IMPLEMENTATION TECHNIQUES**

- § 52:7 In general
- § 52:8 Monitoring, recording, collecting data
- § 52:9 Economic incentives
- § 52:10 Licensing
- § 52:11 Environmental Impact Assessment
- § 52:12 Environmental audit
- § 52:13 Environmental officer
- § 52:14 Technology rating
- § 52:15 Standards
- § 52:16 Public involvement
- § 52:17 Civil penalties

## TABLE OF CONTENTS

§ 52:18 Criminal provisions

### **V. POLLUTION CONTROL**

§ 52:19 In general  
§ 52:20 Air pollution  
§ 52:21 Water pollution  
§ 52:22 Hazardous substances and technologies  
§ 52:23 Waste management  
§ 52:24 Noise control  
§ 52:25 Food  
§ 52:26 Pesticides and plant protection  
§ 52:27 Energy

### **VI. CONSERVATION**

§ 52:28 In general  
§ 52:29 General principles  
§ 52:30 Natural areas  
§ 52:31 Wildlife conservation  
§ 52:32 Geological values  
§ 52:33 Mining  
§ 52:34 Historic preservation  
§ 52:35 Soil conservation and the protection of arable land

### **VII. AREAS OF NOTE NOT COVERED IN THIS STUDY**

§ 52:36 In general

### **VIII. EU HARMONIZATION**

§ 52:37 In general

### **IX. INTERNATIONAL AGREEMENTS**

§ 52:38 In general  
§ 52:39 Procedure and information  
§ 52:40 Air pollution  
§ 52:41 Water pollution  
§ 52:42 Hazardous waste and chemicals  
§ 52:43 Energy and nuclear energy  
§ 52:44 Biodiversity  
§ 52:45 Conservation of natural areas

### **X. CONCLUSION**

§ 52:46 In general

## **CHAPTER 53. ENVIRONMENTAL LAW OF ICELAND—BY MICHAEL CARUSO**

### **I. INTRODUCTION**

§ 53:1 In general

## **II. BACKGROUND**

- § 53:2 Geology and natural resources
- § 53:3 Socioeconomic backdrop

## **III. HISTORICAL/GOVERNMENTAL OVERVIEW**

- § 53:4 In general

## **IV. LEGAL FRAMEWORK**

- § 53:5 In general
- § 53:6 Principal environmental laws—Nature Conservation Act
- § 53:7 —Environmental Impact Assessment
- § 53:8 —Greenhouse gas regulation
- § 53:9 —Fisheries Management Act
- § 53:10 —Desertification and soil conservation
- § 53:11 —Toxic and hazardous substances

## **V. CLIMATE CHANGE**

- § 53:12 In general

## **VI. DEVELOPMENT AND INDUSTRIAL CONFRONTATIONS**

- § 53:13 Landsvirkjun
- § 53:14 Kárahnjúkar project

## **VII. CONCLUSION**

- § 53:15 In general

## **CHAPTER 54. ENVIRONMENTAL LAW OF INDIA—BY MRINALINI SHINDE**

### **I. INTRODUCTION TO THE LEGAL SYSTEM IN INDIA**

- § 54:1 Introduction
- § 54:2 Federalism in India
- § 54:3 The executive
- § 54:4 —Union
- § 54:5 —State
- § 54:6 —Ministry of environment, forest and climate change
- § 54:7 Legislature—Union
- § 54:8 —State
- § 54:9 —Legislative competence
- § 54:10 Judiciary
- § 54:11 Legal representation

### **II. ENVIRONMENTAL LEGISLATION**

- § 54:12 Constitution



## TABLE OF CONTENTS

§ 54:13	Environmental protection
§ 54:14	—Environmental Impact Assessment
§ 54:15	—Citizen participation and environmental clearances: A case study of the Niyamgiri hills
§ 54:16	Water
§ 54:17	Air
§ 54:18	Noise
§ 54:19	Forests and forest rights
§ 54:20	Wildlife
§ 54:21	Biodiversity
§ 54:22	Coastal zone management
§ 54:23	Waste management
§ 54:24	—Solid Waste Management Rules, 2016
§ 54:25	—Other waste management rules
§ 54:26	Public Liability Insurance
§ 54:27	Energy
§ 54:28	Right to Information

### III. ENVIRONMENTAL LAW IN THE COURTS

§ 54:29	Public Interest Litigation
§ 54:30	National Green Tribunal

### IV. PRACTICAL CONSIDERATIONS

§ 54:31	Finding the law
---------	-----------------

### V. CONCLUSION

§ 54:32	In general
---------	------------

## CHAPTER 55. ENVIRONMENTAL LAW OF INDONESIA—BY DR YANTI FRISTIKAWATI, DR KRISTIANTO P. HALOMOAN, & MUHAMMAD NURSHAZNY RAMLAN

### I. OVERVIEW OF INDONESIA

§ 55:1	Geography
§ 55:2	Population and society
§ 55:3	Economy
§ 55:4	Government—The central administration
§ 55:5	—Regional and provincial governments
§ 55:6	The Indonesian legal system—Indonesia's legal pluralism
§ 55:7	—Hierarchy of laws and legal institutions in Indonesia
§ 55:8	—The judicial system
§ 55:9	The state of the environment and biodiversity in Indonesia

### II. ENVIRONMENTAL LAWS AND MANAGEMENT IN INDONESIA

§ 55:10	The environmental authorities in Indonesia
---------	--

- § 55:11 Environmental protection under the constitution
- § 55:12 Environmental governance in Indonesia
- § 55:13 Protection and management of the environment
- § 55:14 —Principles and goals
- § 55:15 —Tools and mechanisms—Planning tools
- § 55:16 — —Environmental pollution and damage control
- § 55:17 — —Strategic environmental assessment
- § 55:18 — —Guidance for land–use planning
- § 55:19 — —Environmental quality standards
- § 55:20 — —Standard criteria for environmental damage
- § 55:21 — —Environmental impact assessment
- § 55:22 — —Statement of readiness for the management and supervision of the environment (UKL–UPL)
- § 55:23 — —Environmental permits
- § 55:24 — —Environmental risk analysis
- § 55:25 — —Environmental auditing
- § 55:26 — —Mitigation, restoration, and preservation
- § 55:27 — —Management of hazardous and toxic materials
- § 55:28 — —Environmental information system
- § 55:29 —Powers, rights, and obligations—The powers and authority of governments and regional governments
- § 55:30 — —Environmental rights, obligations, and prohibitions
- § 55:31 — —Public participation in environmental protection and management
- § 55:32 —Supervision, enforcement provisions and sanctions
- § 55:33 — —Administrative sanctions
- § 55:34 — —Compensatory offences
- § 55:35 — —Criminal offences and sanctions
- § 55:36 Forest management
- § 55:37 Water resources management
- § 55:38 Municipal waste management
- § 55:39 Pollution control—Water pollution
- § 55:40 —Hazardous and toxic wastes
- § 55:41 — —Obligations of parties involved in B3 waste management
- § 55:42 — —Handling of B3 wastes
- § 55:43 — —Management of B3 wastes
- § 55:44 — —Environmental accidents or contamination
- § 55:45 — —Sanctions for non–compliance
- § 55:46 Conservation of living natural resources and their ecosystems
- § 55:47 Conservation in Indonesia’s Exclusive Economic Zone (EEZ)
- § 55:48 Other laws concerning the environment
- § 55:49 —1960 Agrarian law
- § 55:50 —2014 Industry law
- § 55:51 —Indonesian Criminal Code

### III. INTERNATIONAL AND REGIONAL OBLIGATIONS

- § 55:52 Indonesia’s international environmental obligations

## TABLE OF CONTENTS

- § 55:53 Climate change
- § 55:54 Deforestation, REDD+ implementation and implications
- § 55:55 Indonesia's obligations as a member state of ASEAN and the ASEAN agreement on transboundary haze pollution

## IV. CONCLUSION

- § 55:56 In general

# CHAPTER 56. ENVIRONMENTAL LAW OF IRELAND—BY KATHERINE G. MCGEE

## I. INTRODUCTION

- § 56:1 In general

## II. BACKGROUND INFORMATION

- § 56:2 Physical characteristics of Ireland
- § 56:3 Sources of law—Ireland's Common Law background
- § 56:4 —Government structure and agencies
- § 56:5 —The European Union
- § 56:6 Historical overview of Ireland's environment and early regulations

## III. SUBSTANTIVE ENVIRONMENTAL LAW OF IRELAND

- § 56:7 The Constitution of Ireland
- § 56:8 International Conventions concerning the environment
- § 56:9 Ireland's domestic legislation
- § 56:10 —Protection of air quality
- § 56:11 —Protection of water—Freshwater
- § 56:12 — —Coastal and marine environment
- § 56:13 —Protection of natural resources—Conservation
- § 56:14 — —Biodiversity
- § 56:15 —Regulation of waste
- § 56:16 —Land use planning
- § 56:17 —Climate change

## IV. CONCLUSION

- § 56:18 Environmental prognosis
- § 56:19 Future action items
- Appendix 56A. International Environmental Treaties to which Ireland is a Party

# CHAPTER 57. ENVIRONMENTAL LAW OF ITALY—BY ELENA FALLETTI

## I. INTRODUCTION

- § 57:1 In general

## **II. ITALY'S LEGAL SYSTEM: AN OVERVIEW**

- § 57:2 Governmental structure
- § 57:3 Judicial system
- § 57:4 Administration and enforcement

## **III. FUNDAMENTAL ASPECTS OF ITALIAN ENVIRONMENTAL LAW**

- § 57:5 Environmental policies and principles
- § 57:6 System of environmental law
- § 57:7 Environmental information

## **IV. ENVIRONMENTAL PERMITS**

- § 57:8 In general
- § 57:9 Integrated Environmental Permission
- § 57:10 Reporting system for accidents
- § 57:11 The Italian regulation on Environmental Impact Assessment
- § 57:12 Other environmental permits
- § 57:13 Legal Remedies
- § 57:14 Powers of the Authority with regard to environmental permits and environmental liability

## **V. CLEANUP OF WASTE SITES**

- § 57:15 In general
- § 57:16 Contaminated soil or water
- § 57:17 Liability and clean-up measures
- § 57:18 Preventive measures and information duties

## **VI. EMISSION TRADING AND CLIMATE CHANGE**

- § 57:19 Emission trading schemes
- § 57:20 Climate change

## **VII. OTHER ASPECTS OF ENVIRONMENTAL LAW**

- § 57:21 Asbestos
- § 57:22 Water law
- § 57:23 Waste management
- § 57:24 Chemicals law

## **VIII. MONITORING, LIABILITIES AND ENVIRONMENTAL INSURANCE**

- § 57:25 Inspections and monitoring
- § 57:26 Environmental liabilities
- § 57:27 Criminal penalties
- § 57:28 Environmental insurance

TABLE OF CONTENTS

**IX. IMPACT OF ENVIRONMENTAL LAW ON BUSINESS TRANSACTIONS**

§ 57:29 In general

Appendix 57A. List of Significant Environmental Laws and Commentaries

**CHAPTER 58. ENVIRONMENTAL LAW OF JAMAICA—BY NADINE N. PARKES**

**I. INTRODUCTION**

§ 58:1 In general

**II. OVERVIEW OF JAMAICA**

§ 58:2 In general

§ 58:3 Government structure

§ 58:4 Constitution

§ 58:5 Judicial system

**III. SOCIAL AND ECONOMIC ISSUES AFFECTING THE ENVIRONMENT**

§ 58:6 In general

§ 58:7 Population

§ 58:8 Economy

**IV. ENVIRONMENTAL FRAMEWORK LAWS**

§ 58:9 Governing authority for environmental law: The Natural Resources Conservation Authority

§ 58:10 —Environmental Impact Assessments

§ 58:11 —Permits and licenses

**V. SECTORAL ENVIRONMENTAL LAWS**

§ 58:12 In general

§ 58:13 Air pollution

§ 58:14 Public gardens

§ 58:15 Forest protection

§ 58:16 Parks protection

§ 58:17 Water resources and pollution

§ 58:18 —Water resources

§ 58:19 —Protection of supplies

§ 58:20 —Watershed protection

§ 58:21 — —Watershed conditions and problems

§ 58:22 — —Effects of pollution on the watershed

§ 58:23 — —Permits

§ 58:24 — —Institutions

- § 58:25 Coastal zone management
- § 58:26 —Beach control
- § 58:27 — —Public access beaches
- § 58:28 — —Beaches associated with hotels and private ownership
- § 58:29 — —Fishing beaches
- § 58:30 —Fishing industry
- § 58:31 —Mariculture
- § 58:32 —Mangrove and coastal wetlands
- § 58:33 Wildlife protection
- § 58:34 Agriculture

## **VI. OTHER ENVIRONMENTAL ISSUES**

- § 58:35 In general
- § 58:36 Public health
- § 58:37 Litter
- § 58:38 Municipal and hazardous waste management

## **VII. ENVIRONMENTAL IMPACTS FROM NON-ENVIRONMENTAL LAW SECTORS**

- § 58:39 Tourism
- § 58:40 Environmental education
- § 58:41 Non-Governmental Organizations (NGOs)

## **VIII. REGIONAL AND INTERNATIONAL AGREEMENTS**

- § 58:42 In general
- § 58:43 The Cartagena Convention
- § 58:44 —Oil Spill Protocol
- § 58:45 —SPAW Protocol
- § 58:46 —LBSP Protocol
- § 58:47 International and regional environmental agreements

## **IX. FUTURE CONSIDERATIONS**

- § 58:48 Enforcement considerations
- § 58:49 Future consideration

Appendix 58A. Natural Resources Conservation Authority Program Divisions

Appendix 58B. Description or Category of Enterprise, Construction or Developments which require Environmental Impact Assessment pursuant to the NRCA Act, Section 38(1)(b)

Appendix 58C. The Major Wetlands of Jamaica

Appendix 58D. International Agreements

## **CHAPTER 59. ENVIRONMENTAL LAW OF JAPAN—BY AKIO MORISHIMA**

### **I. OVERVIEW OF JAPAN'S LEGAL SYSTEM**

- § 59:1 Governmental structure
- § 59:2 Sources of law
- § 59:3 Relationship between national and local governments
- § 59:4 Judicial system
- § 59:5 Liability and compensation systems

### **II. ENVIRONMENTAL LAWS**

- § 59:6 Environmental policy—Early environmental pollution control
- § 59:7 —The Basic Law for Environmental Pollution Control of 1967
- § 59:8 —Amendment of the Basic Law and the Enactment of 13 Environmental Laws in 1970
- § 59:9 —Japanese cooperation on global environmental issues
- § 59:10 Hazardous waste—The Waste Management Law of 1970 (Waste Law)
- § 59:11 —Hazardous substances in domestic waste
- § 59:12 —Industrial wastes
- § 59:13 Air pollution control—The Soot and Smoke Control Law of 1962
- § 59:14 —The Air Pollution Control Law of 1968
- § 59:15 —Regulation of stationary sources
- § 59:16 —Total mass reduction plans
- § 59:17 —Obligations and penalties under the Air Law
- § 59:18 —Regulation of automobile air emissions
- § 59:19 —Strict liability under the Air Law
- § 59:20 —Local air emissions regulation
- § 59:21 Water pollution control
- § 59:22 —Total mass reduction plans
- § 59:23 —Obligations and penalties under the Water Law
- § 59:24 —Strict liability under the Water Law
- § 59:25 Toxic Substances—Law regarding the manufacture and examination of chemical substances
- § 59:26 Pesticides and herbicides
- § 59:27 Noise Regulation Law
- § 59:28 Land-use control—National Land Use Planning Law
- § 59:29 —Urban Planning Law
- § 59:30 —Other related laws

### **III. IMPLEMENTATION OF ENVIRONMENTAL LAWS**

- § 59:31 Responsible authorities at national level
- § 59:32 Prefectural and municipal authorities
- § 59:33 Enforcement of environmental laws

§ 59:34 —Private pollution prevention agreements

#### **IV. PRACTICAL CONSIDERATIONS**

- § 59:35 Dealing with regulatory authorities
- § 59:36 Dealing with enforcement authorities
- § 59:37 Dealing with citizen groups
- § 59:38 Obtaining permits
- § 59:39 Administrative litigation
- § 59:40 Civil litigation
- § 59:41 Environmental Impact and Risk Assessments
- § 59:42 —Sophistication level of environmental consultants and lawyers

Appendix 59A. List of Significant Environmental Laws with Citations

### **CHAPTER 60. ENVIRONMENTAL LAW OF KENYA—BY KELLY-ANN POKRYWA, J.D.**

#### **I. INTRODUCTION**

§ 60:1 In general

#### **II. HISTORY AND GEOGRAPHY OF KENYA**

- § 60:2 The people of Kenya
- § 60:3 A history of the Republic of Kenya
- § 60:4 Geography and landscape
- § 60:5 Economic infrastructure
- § 60:6 Major environmental problems

#### **III. OVERVIEW OF THE KENYAN LEGAL SYSTEM**

- § 60:7 Development
- § 60:8 The national government
- § 60:9 The judiciary system
- § 60:10 Local governance
- § 60:11 Administrative bodies
- § 60:12 Sources of law
- § 60:13 The Kenyan legal profession

#### **IV. INTRODUCTION TO KENYA'S ENVIRONMENTAL LAW REGIME**

- § 60:14 The evolution of environmental law in Kenya
- § 60:15 Will Kenyans enjoy the constitutional right to a clean and healthy environment?
- § 60:16 Kenya's framework environmental law: The Environmental Management and Coordination Act
- § 60:17 —Administration of the EMCA



## TABLE OF CONTENTS

- § 60:18 —Integration
- § 60:19 —Liability, standing, and judicial remedies
- § 60:20 —Enforcement and judicial review
- § 60:21 Kenya's commitments under international law

## V. THE ENVIRONMENTAL LAWS OF KENYA

- § 60:22 Introduction
- § 60:23 Land use
- § 60:24 Forests and soil conservation
- § 60:25 Water conservation and pollution control
- § 60:26 Wildlife conservation
- § 60:27 Conservation of marine and freshwater resources and coastal zone management
- § 60:28 Air quality
- § 60:29 Climate change and stratospheric ozone depletion
- § 60:30 Waste management
- § 60:31 Control of pesticides and toxic substances
- § 60:32 Radiation control
- § 60:33 Mineral extraction
- § 60:34 Energy use and production
- § 60:35 Genetic resources
- § 60:36 Noise control
- § 60:37 Regulation of the tourist industry
- § 60:38 Other statutes relating to the environment

## VI. CONCLUSION

- § 60:39 In general
- § 60:40 An evaluation of Kenya's sectoral environmental laws
- § 60:41 Effectiveness of the Environmental Management and Coordination Act
- § 60:42 Final words
- Appendix 60A. Kenya Environmental Management and Coordination Act, Act No. 8 of 1999
- Appendix 60B. Kenya National Environmental Tribunal Procedure Rules, 2003

## CHAPTER 61. ENVIRONMENTAL LAW OF KOREA—BY JIWHAN SO

### I. INTRODUCTION

- § 61:1 In general
- § 61:2 History of Korea
- § 61:3 Korean legal system as a civil law tradition

### II. ENVIRONMENTAL ADMINISTRATIVE ASPECTS

- § 61:4 Overview of Korean government system

- § 61:5 —Legislative branch
- § 61:6 —Judiciary
- § 61:7 — —General court
- § 61:8 — —The Constitutional Court
- § 61:9 — —Administration Court
- § 61:10 —The Executive branch
- § 61:11 Environmental administration
- § 61:12 Administrative law

### **III. ENVIRONMENTAL STATUTORY SYSTEMS**

- § 61:13 Constitutional law
- § 61:14 Domestic environmental laws—Introduction
- § 61:15 —Integrative Acts—Basic Environmental Policy Act
- § 61:16 — —Act of Environmental Impact Assessment
- § 61:17 —Sectoral laws—Protection of water
- § 61:18 — —Protection of air
- § 61:19 — —Protection of land
- § 61:20 — —Hazardous substance regulation
- § 61:21 — —Natural environment protection
- § 61:22 — —Other environmental acts
- § 61:23 —Other laws related to the environment
- § 61:24 International environmental agreements

### **IV. CURRENT ENVIRONMENTAL ISSUES AND PROBLEMS IN KOREA**

- § 61:25 In general

### **V. CONCLUSIONS**

- § 61:26 In general

- Appendix 61A. Bibliography
- Appendix 61B. Basic Environmental Policy Act
- Appendix 61C. Air Ambient Environment Preservation Act
- Appendix 61D. Water Quality Conservation Act
- Appendix 61E. Noise and Vibration Control Act
- Appendix 61F. Natural Environment Preservation Act
- Appendix 61G. Waste Control Act
- Appendix 61H. Resource Saving and Recycling Promotion Act
- Appendix 61I. Act Relating to Treatment of Sewage, Excreta and Livestock Waste Water
- Appendix 61J. Transboundary Movement of Waste and the Disposal Act
- Appendix 61K. Environmental Pollution Damage Dispute Adjustment Act

## TABLE OF CONTENTS

Appendix 61L. Liability for Environment Improvement Expense Act

Appendix 61M. Toxic Chemical Act

## **CHAPTER 62. ENVIRONMENTAL LAW OF KUWAIT—BY NADA AL-DUALJ**

### **I. INTRODUCTION TO THE CULTURE AND LEGAL TRADITIONS OF KUWAIT**

§ 62:1 In general

### **II. CHARACTERISTICS OF THE KUWAITI LEGAL SYSTEM**

§ 62:2 In general

§ 62:3 Legislative Power

§ 62:4 Executive power

§ 62:5 Judicial power

§ 62:6 —Courts of the First Instance

§ 62:7 —The Court of Appeal

§ 62:8 —The Court of Cassation

### **III. THE SCOPE OF ENVIRONMENTAL LAW**

§ 62:9 In general

§ 62:10 The constitutional provisions relevant to environmental protection

§ 62:11 The constitutional provisions relevant to the environmental protection—Public health

§ 62:12 —Natural resources conservation and proper exploitation

§ 62:13 —Shouldering in disasters and liability for damages

§ 62:14 Natural resources management

§ 62:15 —The Constitution

§ 62:16 —Agriculture and fisheries patrimony

§ 62:17 —Petroleum patrimony

§ 62:18 —The law establishing the Environment Public Authority

§ 62:19 —The Law Decree Relevant to the Interdiction of Certain Acts Hurtful to Public Cleanliness and Agriculture

§ 62:20 Urban environment and cultural heritage

§ 62:21 —The Constitution

§ 62:22 —Kuwait Municipality

§ 62:23 —Kuwait Monuments Law

§ 62:24 —Law concerning the Conservation of the Petroleum Patrimony Resources

§ 62:25 Sustainable development

§ 62:26 —The Environment Public Authority accomplishments according to Agenda 21 Articles

§ 62:27 —Law Decree concerning the Future Generations Fund

#### **IV. ADHERENCE TO INTERNATIONAL ENVIRONMENTAL TREATIES**

- § 62:28 In general
- § 62:29 International treaties
- § 62:30 Regional instruments—Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution
- § 62:31 —Protocol on the Protection of Marine Environment from Pollution Derived from Land-Based Sources
- § 62:32 —Protocol of the Control of Marine Transboundary Movements of Hazardous Wastes and their Disposal
- § 62:33 —Protocol Relative to the Marine Pollution Caused from Exploring and Exploiting the Continental Shelf
- § 62:34 —General policies and principles of environmental protection in the Gulf Cooperation Council

#### **V. ENVIRONMENTAL LAWS**

- § 62:35 Air pollution control
- § 62:36 Protection of water
- § 62:37 Soil pollution
- § 62:38 Flora
- § 62:39 Fauna, grazing and hunting
- § 62:40 Fish and fisheries
- § 62:41 Marine environment
- § 62:42 Endangered species
- § 62:43 Agriculture
- § 62:44 Desertification
- § 62:45 Hazardous waste management
- § 62:46 Oil resources
- § 62:47 Public health

#### **VI. ENVIRONMENTAL IMPACT ASSESSMENT (EIA)**

- § 62:48 The law establishing the Environment Public Authority
- § 62:49 The Ministerial Decision regulating the procedures of the Environmental Impact Assessment for Structural and Industrial projects
- § 62:50 The law concerning the conservation of the petroleum patrimony resources
- § 62:51 Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution and its protocols

#### **VII. ENVIRONMENTAL IMPACT FROM NON-ENVIRONMENTAL LAW SECTORS**

- § 62:52 Industry law
- § 62:53 Trade law

## TABLE OF CONTENTS

### **VIII. ENFORCEMENT OF THE ENVIRONMENTAL LAWS**

- § 62:54 In general
- § 62:55 Criminal enforcement
- § 62:56 Administrative enforcement
- § 62:57 —Notification
- § 62:58 —Permits
- § 62:59 —Inspection
- § 62:60 —Fines
- § 62:61 —Expropriation
- § 62:62 —Clean-up and restoration
- § 62:63 Civil enforcement—Liability for damage
- § 62:64 Local Non-Governmental Organizations (NGOs) and scientific institutions enforcement—Local Non-Governmental Organizations (NGOs) enforcement—Kuwaiti Diving Team
- § 62:65 — —Kuwaiti Society for Environmental Protection
- § 62:66 —The scientific institutions enforcement—Kuwait Foundation for the Advancement of Sciences (KFAS)
- § 62:67 — —Kuwait Institute for Scientific Research (KISR)

### **IX. OBSERVATIONS AND RECOMMENDATIONS**

- § 62:68 Observations
- § 62:69 Recommendations

## **CHAPTER 63. ENVIRONMENTAL LAW OF KYRGYZSTAN—BY ZURA AKMATOVA**

### **I. INTRODUCTION**

- § 63:1 Kyrgyzstan
- § 63:2 The Kyrgyz environmental law

### **II. LEGAL SYSTEM**

- § 63:3 Governmental structure
- § 63:4 Judicial system
- § 63:5 Administration and enforcement

### **III. NATIONAL ENVIRONMENTAL LAW**

- § 63:6 Environmental legislation and reform
- § 63:7 Sources and system of environmental law
- § 63:8 Major principles of the environmental law

### **IV. ENVIRONMENTAL EXPERTISE, PERMITS, AND INFORMATION**

- § 63:9 Environmental expertise

- § 63:10 Licensing / permits
- § 63:11 Environmental information

## **V. NATIONAL SECTORAL LAW**

- § 63:12 Land legislation
- § 63:13 The Pasture Act
- § 63:14 The Water Law
- § 63:15 The Energy Law
- § 63:16 Glaciers
- § 63:17 The Law on Minerals
- § 63:18 The Mountains Law
- § 63:19 The Forest Code

## **VI. MONITORING, ENVIRONMENTAL INSURANCE, AND LIABILITY**

- § 63:20 Monitoring
- § 63:21 Insurance
- § 63:22 Liability

## **VII. INTERNATIONAL ENVIRONMENTAL LAW AND KYRGYZSTAN**

- § 63:23 International law prevalence
- § 63:24 Principles of international cooperation
- § 63:25 Transboundary water management: Regional aspect

Appendix 63A. Laws, Conventions, and Reference Materials

# **CHAPTER 64. ENVIRONMENTAL LAW OF MAURITIUS—BY DENNIS AGELEBE AND BHAVNA MAHADEW**

## **I. OVERVIEW OF MAURITIUS**

- § 64:1 In general
- § 64:2 Economy of Mauritius
- § 64:3 Government of Mauritius
- § 64:4 Judicial system of Mauritius
- § 64:5 Environmental Conditions in Mauritius

## **II. MAURITIUS' ENVIRONMENTAL LAW**

- § 64:6 Constitution of the Republic of Mauritius, 1968
- § 64:7 Environmental Protection Act 2002
- § 64:8 Town and Country Planning Act, 1995
- § 64:9 Beach Authority (Use of Public Beach) Regulations 2004
- § 64:10 Fisheries and Marine Resources Act, 2007
- § 64:11 Ground Water Act
- § 64:12 National Parks and Reserves Regulations 1996

## TABLE OF CONTENTS

- § 64:13 Rivers and Canals Act
- § 64:14 Wastewater Management Authority Act 2000

### III. INSTITUTIONS

- § 64:15 The Environment Ministry
- § 64:16 Coordination and Project Implementation Division
- § 64:17 Policy and Planning Division
- § 64:18 Environmental Assessment Division
- § 64:19 EIA/PER Monitoring Division
- § 64:20 Environmental Law and Prosecution Division
- § 64:21 Environment Statistics Unit
- § 64:22 Information and Education Division
- § 64:23 Integrated Coastal Zone Management Division
- § 64:24 National Environmental Laboratory
- § 64:25 Pollution Prevention and Control Division
- § 64:26 Plastic Management Division
- § 64:27 Sustainable Development Division

### IV. ENFORCEMENT

- § 64:28 Environmental Police

### V. CONCLUSION

- § 64:29 In conclusion

## **CHAPTER 65. ENVIRONMENTAL LAW OF MEXICO—BY JOSE JUAN GONZALEZ, PROFESSOR AT METROPOLITAN AUTONOMOUS UNIVERSITY, MEXICO**

### I. INTRODUCTION

- § 65:1 In general

### II. MEXICO’S LEGAL SYSTEM: AN OVERVIEW

- § 65:2 Governmental structure
- § 65:3 Judicial system
- § 65:4 Administration and enforcement

### III. FUNDAMENTAL ASPECTS OF MEXICAN ENVIRONMENTAL LAW

- § 65:5 Environmental policies and principles
- § 65:6 System of environmental law
- § 65:7 Environmental information

### IV. ENVIRONMENTAL PERMITS

- § 65:8 In general

- § 65:9 Environmental Standards
- § 65:10 Federal Act on Environmental Impact Assessment
- § 65:11 Unique environmental license
- § 65:12 Legal remedies
- § 65:13 Powers of the authority with regard to environmental permits and environmental liability

## **V. CLEANUP OF WASTE SITES**

- § 65:14 Contaminated soil and waters

## **VI. EMISSION TRADING AND CLIMATE CHANGE**

- § 65:15 Emission trading schemes
- § 65:16 Environmental services
- § 65:17 Climate change

## **VII. OTHER ASPECTS OF ENVIRONMENTAL LAW**

- § 65:18 Water law
- § 65:19 Waste management

## **VIII. MONITORING, LIABILITIES AND ENVIRONMENTAL INSURANCE**

- § 65:20 Environmental liability
- § 65:21 Criminal penalties

# **CHAPTER 66. ENVIRONMENTAL LAW OF MONGOLIA—BY ALVIN K. LEONG**

## **I. INTRODUCTION**

- § 66:1 Description of Mongolia
- § 66:2 Mongolian legal history
- § 66:3 Mongolia's environmental challenges

## **II. ENVIRONMENTAL LAW IN MONGOLIA**

- § 66:4 In general
- § 66:5 The Constitution
- § 66:6 International treaties
- § 66:7 General environmental laws
- § 66:8 Law on Environmental Impact Assessment

## **III. INSTITUTIONAL CAPACITY**

- § 66:9 Administrative system
- § 66:10 Judicial system

## **IV. CLIMATE CHANGE**

- § 66:11 In general



TABLE OF CONTENTS

**V. CONCLUSION**

§ 66:12 In general

**CHAPTER 67. ENVIRONMENTAL LAW OF MOROCCO—BY ALEXIS THUAU**

**I. INTRODUCTION**

§ 67:1 In general

**II. A BRIEF HISTORY OF MOROCCO**

§ 67:2 In general

§ 67:3 Before the French colonization

§ 67:4 The French Protectorate

§ 67:5 Environmental law since 1956

**III. LEGAL SOURCES**

§ 67:6 In general

§ 67:7 The Constitution

§ 67:8 —The reorganization of powers

§ 67:9 —The emergence of a comprehensive set of rights and freedoms

§ 67:10 —The creation of a more effective constitutional review framework

§ 67:11 Legislation

§ 67:12 Regulations

§ 67:13 Customary laws

§ 67:14 International law

**IV. LEGAL INSTRUMENTS**

§ 67:15 Major areas of legislative concern

§ 67:16 “Umbrella Law” on the protection and promotion of the environment

§ 67:17 Listed facilities

§ 67:18 Air

§ 67:19 Water

§ 67:20 Soils

§ 67:21 Waste management

§ 67:22 Biodiversity

§ 67:23 Environmental Impact Statements

**V. ENFORCEMENT OF THE ENVIRONMENTAL LAWS**

§ 67:24 The judiciary generally

§ 67:25 Civil and criminal courts

§ 67:26 Administrative courts

§ 67:27 Civil, administrative and criminal liability

§ 67:28 —Civil and criminal litigation

§ 67:29 —Administrative litigation

## **CHAPTER 68. ENVIRONMENTAL LAW OF MOZAMBIQUE—BY TAÍS KHOURI LAUREANO**

### **I. INTRODUCTION**

§ 68:1 General information about Mozambique

§ 68:2 Historical background

§ 68:3 Economy

§ 68:4 Environmental issues

### **II. THE CONSTITUTION OF MOZAMBIQUE**

§ 68:5 In general

### **III. INTERNATIONAL OBLIGATIONS**

§ 68:6 In general

§ 68:7 Global conventions ratified by Mozambique

§ 68:8 Regional agreements ratified by Mozambique

### **IV. NATIONAL ENVIRONMENTAL LAW AND POLICY**

§ 68:9 Framework statute

§ 68:10 Sectoral statutes

§ 68:11 Institutions in charge of environmental law  
implementation

§ 68:12 Environmental protection tools

§ 68:13 Environmental policies and strategies

### **V. ENVIRONMENTAL ADAPTATION TO CLIMATE CHANGE**

§ 68:14 In general

§ 68:15 Impacts from climate change expected to occur in  
Mozambique

§ 68:16 Measures being taken in policy or law to adapt to climate  
changes

### **VI. GAPS IN THE LEGAL SYSTEM FOR ENVIRONMENTAL PROTECTION**

§ 68:17 In general

### **VII. INTERNATIONAL RELATIONS AND THE RISE OF A NEW SCENARIO**

§ 68:18 In general

TABLE OF CONTENTS

**CHAPTER 69. ENVIRONMENTAL LAW OF  
MYANMAR (PRIOR TO THE MILITARY COUP  
OF 1 FEBRUARY 2021)—BY JONATHAN  
LILJEBLAD, SU YIN HTUN, PO PO MAUNG,  
WILLIAM SCHULTE**

**I. OVERVIEW OF MYANMAR**

- § 69:1 Geography
- § 69:2 Population and society
- § 69:3 Economy
- § 69:4 Governance structure
- § 69:5 Legal system

**II. ENVIRONMENTAL LEGAL SYSTEM**

- § 69:6 In general
- § 69:7 Environmental institutions—National level
- § 69:8 —Local level
- § 69:9 Laws, policies & regulations on the environment

**III. ENVIRONMENTAL POLICY**

- § 69:10 In general
- § 69:11 2008 Constitution
- § 69:12 2019 National Environmental Policy
- § 69:13 2018 Myanmar Sustainable Development Plan
- § 69:14 2015 Myanmar Sustainable Development Goals
- § 69:15 2012 Environmental Conservation Law

**IV. ENVIRONMENTAL LAWS AND REGULATIONS—  
GENERAL**

- § 69:16 2014 Environmental Conservation Rules
- § 69:17 2015 Environmental Impact Assessment Procedure
- § 69:18 City Development Committees Laws
- § 69:19 2016 Investment Law and 2017 Investment Rules

**V. ENVIRONMENTAL LAWS AND REGULATIONS—  
AGRICULTURE AND IRRIGATION**

- § 69:20 In general
- § 69:21 2016 Pesticide Law
- § 69:22 1993 Plant Pest Quarantine Law and 2011 Amendment
- § 69:23 2002 Fertilizer Law and 2015 Amendment
- § 69:24 2011 Seed Law and 2015 Amendment

**VI. ENVIRONMENTAL LAWS AND REGULATIONS—  
HEALTH**

- § 69:25 In general

- § 69:26 1992 National Drug Law
- § 69:27 1995 Prevention and Control of Communicable Diseases  
Law and 2011 Amendment
- § 69:28 1997 National Food Law and 2013 Amendment
- § 69:29 2006 Control of Smoking and Consumption of Tobacco  
Product Law

## **VII. ENVIRONMENTAL LAWS AND REGULATIONS— MINING AND OIL**

- § 69:30 In general
- § 69:31 1992 Salt Enterprise Law
- § 69:32 1994 Mines Law, 2015 Amendment, and 2018 Mines Rules
- § 69:33 1995 Pearl Law and 2014 Amendment
- § 69:34 1995 Gemstones Law and 2016 Amendment

## **VIII. ENVIRONMENTAL LAWS AND REGULATIONS— POLLUTION & TOXIC MATERIALS**

- § 69:35 In general
- § 69:36 2017 Territorial Sea and Maritime Zone Law
- § 69:37 2020 Industrial Zone Law
- § 69:38 2015 National Environmental Quality (Emission)  
Guidelines
- § 69:39 2013 Prevention from Danger of Chemical and Associated  
Materials Law
- § 69:40 1990 Private Industrial Enterprise Law

## **IX. ENVIRONMENTAL LAWS AND REGULATIONS— ENERGY**

- § 69:41 In general
- § 69:42 2018 Science, Technology, and Innovation Law
- § 69:43 2014 Electricity Law and 2015 Electricity Rules
- § 69:44 1998 Atomic Energy Law

## **X. ENVIRONMENTAL LAWS AND REGULATIONS— TRANSPORTATION**

- § 69:45 In general
- § 69:46 2020 Motor Vehicle Accident Management and Motor  
Vehicle Management Law

## **XI. ENVIRONMENTAL LAWS AND REGULATIONS— LAND**

- § 69:47 In general
- § 69:48 2012 Farmland Law
- § 69:49 2012 Farmland Rules
- § 69:50 2012 Vacant, Fallow, and Virgin Lands Management Law  
and 2018 Amendment

TABLE OF CONTENTS

**XII. ENVIRONMENTAL LAWS AND REGULATIONS—  
WATER**

- § 69:51 In general
- § 69:52 2006 Conservation of Water Resources and Rivers Law

**XIII. ENVIRONMENTAL LAWS AND REGULATIONS—  
FLORA AND FAUNA**

- § 69:53 In general
- § 69:54 1989 Law Relating to Aquaculture
- § 69:55 1990 Marine Fisheries Law and 1993 Amendment
- § 69:56 1991 Freshwater Fisheries Law
- § 69:57 2018 Forest Law
- § 69:58 2018 Conservation of Biodiversity and Protected Areas  
Law
- § 69:59 1993 Animal Health and Development Law and 2010  
Amendment
- § 69:60 2000 National Code of Forest Harvesting
- § 69:61 1989 Law Relating to Aquaculture

**XIV. INTERNATIONAL ENVIRONMENTAL  
INSTRUMENTS AND PROGRAMMES**

- § 69:62 In general

**CHAPTER 70. ENVIRONMENTAL LAW OF THE  
NETHERLANDS—BY HUUG H. LUIGIES**

**I. STRUCTURE OF DUTCH GOVERNMENT**

- § 70:1 The Netherlands
- § 70:2 The executive branch
- § 70:3 The legislative branch
- § 70:4 The judicial branch—Judges
- § 70:5 —The court system
- § 70:6 — —Civil and criminal jurisdiction
- § 70:7 — —Administrative jurisdiction
- § 70:8 — —Administrative appeal
- § 70:9 National Ombudsman
- § 70:10 Decentralization
- § 70:11 Structure of the territorial governments—Provinces
- § 70:12 —Municipalities
- § 70:13 —Other public bodies
- § 70:14 Sources of Dutch law
- § 70:15 —Procedural and substantive laws
- § 70:16 —Custom
- § 70:17 —Case law
- § 70:18 —Conventions
- § 70:19 Classification of the law

**II. ENVIRONMENTAL LAWS**

- § 70:20 In general
- § 70:21 General Provisions for Environmental Protection Act
- § 70:22 —Procedure for applying for permits and exemptions
- § 70:23 —Procedure for change or revocation of permits and exemptions
- § 70:24 —Other orders
- § 70:25 —Appeal
- § 70:26 —Environmental Impact Report
- § 70:27 —Financial provisions
- § 70:28 —The Central Council for Environmental Protection
- § 70:29 Nuisance Act
- § 70:30 —The concept of “establishment”
- § 70:31 —Implementation and enforcement
- § 70:32 Water legislation—Pollution of Surface Waters Act
- § 70:33 —Groundwater Act
- § 70:34 —Water Management Act
- § 70:35 —Sea Water Pollution Act
- § 70:36 —Act for the Prevention of Pollution by Ships
- § 70:37 Air Pollution Act
- § 70:38 Legislation with regard to the soil—Soil Protection Act
- § 70:39 —Interim Act on Soil Cleanup
- § 70:40 Waste legislation—Waste Act
- § 70:41 —Chemical Waste Act
- § 70:42 Noise pollution legislation—Noise Abatement Act
- § 70:43 —Aviation Act
- § 70:44 Regulation of hazardous substances—Act on Substances Hazardous to the Environment
- § 70:45 —Pesticides Act of 1962
- § 70:46 —Hazardous Substances Act
- § 70:47 Nuclear Energy Act
- § 70:48 Nuclear Accidents Liability Act
- § 70:49 Mining laws—Mining Act of 1810
- § 70:50 —Mining Act of 1903
- § 70:51 —Tracing of Minerals Act
- § 70:52 —Continental Shelf Mining Act
- § 70:53 Implementation of environmental laws

**III. ENFORCEMENT**

- § 70:54 In general
- § 70:55 Administrative enforcement
- § 70:56 —Administrative powers
- § 70:57 —Closure of an establishment
- § 70:58 —Penalties
- § 70:59 —Withdrawal of the permit
- § 70:60 Criminal enforcement
- § 70:61 —Economic Offenses Act

TABLE OF CONTENTS

§ 70:62 Civil enforcement

**IV. BUSINESS CONSIDERATIONS**

§ 70:63 In general

§ 70:64 Environmental considerations associated with transferring an existing business

§ 70:65 Environmental considerations associated with starting a new business

Appendix 70A. List of Significant Environmental Laws

**Volume 3**

**CHAPTER 71. ENVIRONMENTAL LAW OF NICARAGUA—BY ELAINE HSIAO**

§ 71:1 Background information

§ 71:2 Foundations of a legal framework for environmental protection

§ 71:3 Environmental legislation by sector

§ 71:4 —Natural resources management

§ 71:5 — —Conservation of forest resources

§ 71:6 — —Water conservation in Nicaragua

§ 71:7 —Protected areas

§ 71:8 —Biodiversity and endangered species

§ 71:9 —Environmental Impact Assessments

§ 71:10 International law and environmental treaties

§ 71:11 —Regional conventions

§ 71:12 —Regional institutions

§ 71:13 Additional sources of information

**CHAPTER 72. ENVIRONMENTAL LAW OF NIGERIA—BY PROF. MUHAMMED TAWFIQ LADAN (PHD)**

**I. REVIEW OF NESREA ACT 2007 AND REGULATIONS 2009–2011: A NEW DAWN IN ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT IN NIGERIA**

§ 72:1 Introduction

§ 72:2 Brief overview of the development of environmental law in Nigeria

§ 72:3 Major drawbacks of the defunct Federal Environmental Protection Agency (FEPA) Act and Regulations 1991–2006

§ 72:4 Lessons learnt

§ 72:5 Establishment of NESREA: a new dawn

§ 72:6 —Mandate and powers of NESREA

§ 72:7 —Enforcement powers of NESREA

- § 72:8 Rationale for the 2009 - 2011 Environmental Regulations
- § 72:9 National Environmental (Wetlands, River Banks and Lake Shores) Regulations, 2009
- § 72:10 National Environmental (Watershed, Mountainous, Hilly and Catchment Areas) Regulations, 2009
- § 72:11 National Environmental (Sanitation and Wastes Control) Regulations, 2009
- § 72:12 National Environmental (Permitting and Licensing System) Regulations, 2009
- § 72:13 National Environmental (Access to Genetic Resources and Benefit Sharing) Regulations, 2009
- § 72:14 National Environmental (Mining and Processing of Coal, Ores and Industrial Minerals) Regulations 2009
- § 72:15 National Environmental (Ozone Layer Protection) Regulations, 2009
- § 72:16 National Environmental (Food, Beverages and Tobacco Sector) Regulations, 2009
- § 72:17 National Environmental (Textile, Wearing Apparel, Leather and Footwear Industry) Regulations, 2009
- § 72:18 National Environmental (Noise Standards and Control) Regulations, 2009
- § 72:19 National Environmental (Chemical, Pharmaceutical, Soap and Detergent Manufacturing Industries) Regulations, 2009
- § 72:20 Other Regulations
- § 72:21 Conclusion

## II. ROLE OF THE NIGERIAN JUDICIARY IN ENVIRONMENTAL GOVERNANCE

- § 72:22 Introduction
- § 72:23 —Ensuring sustainable industrial production
- § 72:24 —Preventing and reversing desertification
- § 72:25 —Managing forests, wildlife and natural resources
- § 72:26 —Combating floods and erosion
- § 72:27 Brief overview of the development of environmental law in Nigeria
- § 72:28 Overview of Nigeria's court system
- § 72:29 Critical survey of judiciary's contribution to environmental governance
- § 72:30 —The Supreme Court of Nigeria: Facilitating access to environmental justice and legal remedies by resolving jurisdictional conflicts
- § 72:31 —Liberalizing the technical procedural requirements of *locus standi*/representative capacity for access to environmental justice
- § 72:32 — —*Locus standi*/representative capacity
- § 72:33 —The judiciary and application of the law of torts in environmental context: access to legal remedies—Pre-action notices and statutory limitations



## TABLE OF CONTENTS

- § 72:34 — —Application of the law of torts of negligence
- § 72:35 —Burden of proof and claim of special damages in environmental matters
- § 72:36 Challenges facing the judiciary in environmental governance and the way forward
- § 72:37 Conclusion and viable options

## **III. BIODIVERSITY RESOURCES LAW AND POLICY FOR SUSTAINABLE DEVELOPMENT IN NIGERIA**

- § 72:38 Introduction
- § 72:39 Concept and values of biodiversity and the key concerns of the Biodiversity Conventions
- § 72:40 —The concept of biodiversity
- § 72:41 —Values of biodiversity
- § 72:42 — —Ecological sustainability
- § 72:43 — —Economic uses
- § 72:44 — —Socio-cultural uses
- § 72:45 — —Biotechnological values
- § 72:46 — —Recreational values
- § 72:47 —The key concerns of Biodiversity Conventions
- § 72:48 Status, components and threats to Nigeria's biodiversity
- § 72:49 Status and components of Nigeria's biodiversity
- § 72:50 —Ecosystem diversity
- § 72:51 —Species diversity
- § 72:52 — —Plant biodiversity
- § 72:53 — —Animal biodiversity
- § 72:54 — —Biodiversity of micro-organisms
- § 72:55 —Genetic diversity conservation in Nigeria
- § 72:56 Conservation and utilization of biodiversity resources in Nigeria
- § 72:57 Problems of biodiversity conservation and management in Nigeria
- § 72:58 —Priorities for research and action on biodiversity in Nigeria
- § 72:59 —Fuelwood collection
- § 72:60 —Overgrazing
- § 72:61 —Forest fires
- § 72:62 —Indiscriminate hunting
- § 72:63 —Wildlife trade
- § 72:64 —Shifting cultivation
- § 72:65 —Water pollution
- § 72:66 —Air pollution
- § 72:67 —Acid rain
- § 72:68 —Climate change
- § 72:69 —Desertification
- § 72:70 —Soil erosion
- § 72:71 —Lowering of water tables
- § 72:72 —Land reclamation

- § 72:73 —Dams
- § 72:74 —Population growth
- § 72:75 —Misuse of pesticides
- § 72:76 —Poor yield results plantation establishment
- § 72:77 —Marine pollution and over exploitation
- § 72:78 —Oil pollution
- § 72:79 —Management problems
- § 72:80 —Low investment
- § 72:81 Inadequacies in biodiversity conservation legislations
- § 72:82 —The 1999 Constitution
- § 72:83 —Soil conservation
- § 72:84 —Land use and planning laws
- § 72:85 —Protected areas and forestry
- § 72:86 —Animal resources
- § 72:87 —Fisheries
- § 72:88 Regulatory control over genetic resource and  
bio-technology
- § 72:89 Environmental Impact Assessment (E.I.A.) and natural  
resources legislation
- § 72:90 Institutional framework
- § 72:91 Biodiversity conservation and the challenges of poverty  
eradication and sustainable development in  
implementation
- § 72:92 —Poverty, environment and development
- § 72:93 Conservation and sustainability of biodiversity resources
- § 72:94 The challenge of domestic implementation of Biodiversity  
Conventions in Nigeria
- § 72:95 Conclusion

#### **IV. WATER LAW AND POLICY: REVIEW OF THE REGULATORY AND POLICY FRAMEWORKS OF THE NIGERIAN WATER SECTOR FOR SUSTAINABLE MANAGEMENT AND PROTECTION OF WATER RESOURCES**

- § 72:96 Introduction
- § 72:97 Review of Nigerian laws and policies on management and  
protection of water resources
- § 72:98 —Status of water resources in Nigeria
- § 72:99 —Customary laws and practices on water resources in  
Nigeria
- § 72:100 — —Customary practices and laws on water resources
- § 72:101 — —Women and management of water resources
- § 72:102 — —Enforcement
- § 72:103 —Legal and policy frameworks on water in Nigeria
- § 72:104 — —Administration of water law in Nigeria
- § 72:105 — —Regulation of water pollution
- § 72:106 — —Policy framework on water resources
- § 72:107 —International response to the need for sustainable  
management and protection of water resources

## TABLE OF CONTENTS

- § 72:108 — —Protection and management of transboundary aquifers in Africa
- § 72:109 — — —Meeting the challenges of the UNGA resolution on the law of transboundary aquifers (TA)
- § 72:110 Conclusion

## V. LAND USE MANAGEMENT AND ENVIRONMENTAL PROTECTION LAW AND POLICY IN NIGERIA

- § 72:111 Introduction
- § 72:112 Role of environmental law in regulating land use and protection of the environment in Nigeria
- § 72:113 —Land use problems and their impact on the environment
- § 72:114 —Key environmental legislations on land use regulation and environmental protection
- § 72:115 Deforestation
- § 72:116 Conclusion
- Appendix 72A. Brief Description of the Four Broad Environmental Problems / Challenges being accorded Highest Priority at present in Nigeria
- Appendix 72B. List of Main National Environmental Laws in Nigeria
- Appendix 72C. Environmental Rights Case Law in Nigeria: Jonah Gbemre v. Shell, NNPC and AGF (2005) Suit No.: FHC/B/CS/53/05 — Judgement
- Appendix 72D. Annex Tables regarding Biodiversity in Nigeria
- Appendix 72E. Tables of Cases, Legislation, and Other Materials Cited (in Alphabetical Order)
- Appendix 72F. Bibliography

## CHAPTER 73. ENVIRONMENTAL LAW OF PAKISTAN—BY JAWAD HASSAN

### I. OVERVIEW

- § 73:1 In general

### II. INTRODUCTION

- § 73:2 Geographic setting
- § 73:3 Economic context
- § 73:4 Historical development of Pakistani law
- § 73:5 —Early civilization
- § 73:6 —Islam in India from 711 AD
- § 73:7 —Mughal period (1526-1757)
- § 73:8 —British period (1757-1947)
- § 73:9 Environmental context

### **III. OVERVIEW OF PAKISTAN'S LEGAL SYSTEM**

- § 73:10 Legal system
- § 73:11 Constitution
  - § 73:12 —Earlier Constitutions
  - § 73:13 —Present Constitution
- § 73:14 Governmental structure—Federal government
  - § 73:15 —Provincial government
  - § 73:16 —Local government
- § 73:17 Courts
  - § 73:18 —Supreme Court of Pakistan
  - § 73:19 —Federal Islamic (Shari'at) Court
  - § 73:20 —High Courts of Provinces
  - § 73:21 —Subordinate courts
  - § 73:22 —Other tribunals
- § 73:23 Office of the Ombudsman
- § 73:24 Types of law
- § 73:25 Executive agencies
  - § 73:26 —Primary government organization
  - § 73:27 —Secondary government agencies
  - § 73:28 —International organizations

### **IV. PROPOSED ENVIRONMENTAL LAW DEVELOPMENT**

- § 73:29 In general

### **V. INTERNATIONAL ENVIRONMENTAL TREATIES**

- § 73:30 Environmental treaties effective in Pakistan
- § 73:31 Atmosphere
- § 73:32 Oceans and seas
- § 73:33 Biological diversity
- § 73:34 Hazardous substance and activities
- § 73:35 Environmental protection and war

### **VI. ENVIRONMENTAL STATUTES**

- § 73:36 In general
- § 73:37 Natural resources—Water
  - § 73:38 —Ground water
  - § 73:39 —Soil
  - § 73:40 —Minerals
  - § 73:41 —Oil
  - § 73:42 —Gas
  - § 73:43 —Agriculture
  - § 73:44 —Air
  - § 73:45 —Forest
- § 73:46 Wildlife—Wildlife and fisheries (enforced by provincial forest departments)

## TABLE OF CONTENTS

- § 73:47 —Wetlands
- § 73:48 —Parks and reserves
- § 73:49 —Endangered species
- § 73:50 Manufacturing and pollution
- § 73:51 —Solid and hazardous waste
- § 73:52 —Toxic and hazardous waste
- § 73:53 —Safety and health
- § 73:54 Electrical
- § 73:55 —Thermal power
- § 73:56 —Hydro power
- § 73:57 —Electric power transmission lines
- § 73:58 Noise
- § 73:59 Oceans and marine resources
- § 73:60 Transboundary issues
- § 73:61 Cultural heritage

## **VII. PROCEDURES AND TOOLS**

- § 73:62 Permits, standards, monitoring
- § 73:63 Enforcement—Civil, criminal and administrative
- § 73:64 — —Information disclosure
- § 73:65 Environmental Impact Assessment

## **VIII. PRACTICAL CONSIDERATION**

- § 73:66 In general

## **IX. CONCLUSION**

- § 73:67 In general

# **CHAPTER 74. ENVIRONMENTAL LAW OF PAPUA NEW GUINEA—BY TRISHA SIRCAR**

## **I. INTRODUCTION**

- § 74:1 In general
- § 74:2 United Nations Millenium Development Goals
- § 74:3 Environmental concerns

## **II. LEGAL SYSTEM: THE GOVERNMENT, THE LEGAL FRAMEWORK, AND CUSTOMARY LAW**

- § 74:4 Overview
- § 74:5 The Constitution
- § 74:6 Provincial and local level governance
- § 74:7 Environmental statutes
- § 74:8 Treaties
- § 74:9 —Kyoto Protocol
- § 74:10 Investing in PNG

### **III. PRIORITY ENVIRONMENTAL LAW CONCERNS**

- § 74:11 Rainforest deforestation
- § 74:12 Poverty and population growth
- § 74:13 Mining
- § 74:14 Biodiversity
- § 74:15 Sustainable management of marine resources (fishing and offshore mining)
- § 74:16 Island vulnerability to natural disasters, such as droughts, sea-level rise and climate change
- § 74:17 —Climate change, global warming and sea level rise
- § 74:18 —Natural disasters

### **IV. CONCLUSIONS**

- § 74:19 In general

## **CHAPTER 75. ENVIRONMENTAL LAW OF PERU—BY HERNAN LOPEZ**

### **I. INTRODUCTION**

- § 75:1 In general

### **II. OVERVIEW OF THE PERUVIAN ADMINISTRATION AND LEGAL SYSTEM**

- § 75:2 Government structure
- § 75:3 Administration
- § 75:4 Environmental authority in Peru
- § 75:5 —Legislative power
- § 75:6 —Executive power
- § 75:7 —Judicial power

### **III. ADHERENCE TO INTERNATIONAL ENVIRONMENTAL AGREEMENTS**

- § 75:8 In general
- § 75:9 The Convention on Biological Diversity (CBD)
- § 75:10 The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- § 75:11 The Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR)
- § 75:12 Framework Convention on Climate Change (CCC)
- § 75:13 Convention on the Conservation of Migratory Species of Wild Animals (CMS)
- § 75:14 Convention to Combat Desertification (CCD)

### **IV. ENVIRONMENTAL LAW AND THE CONSTITUTION**

- § 75:15 In general

## TABLE OF CONTENTS

### **V. THE ENVIRONMENTAL CODE AND OTHER LAWS**

- § 75:16 In general
- § 75:17 Environmental Code
- § 75:18 Criminal Code
- § 75:19 Civil Procedure Code
- § 75:20 Framework law for the improvement of private investment
- § 75:21 Organic law for the sustainable use of natural resources
- § 75:22 General law of health
- § 75:23 General water law

### **VI. ADHERENCE TO ENVIRONMENTAL TREATIES: LEGAL STATUS OF INTERNATIONAL TREATIES**

- § 75:24 In general
- § 75:25 Regional and bilateral legislation

### **VII. ENVIRONMENTAL REGULATION AND ADMINISTRATION**

- § 75:26 Standards
- § 75:27 Permits
- § 75:28 Economic incentives/disincentives
- § 75:29 Zoning and land use controls
- § 75:30 Environmental Impact Assessment (EIA)
- § 75:31 —Contents of the Environmental Impact Study (EIS)
- § 75:32 —Description of the process
- § 75:33 —Agencies involved
- § 75:34 Enforcement of environmental law
- § 75:35 Public participation

### **VIII. POLLUTION**

- § 75:36 Water (surface/ground)
- § 75:37 Air
- § 75:38 Solid waste
- § 75:39 Hazardous waste/toxic materials
- § 75:40 Radioactive waste
- § 75:41 Thermal waste
- § 75:42 CFCs and stratospheric ozone layer protection

### **IX. NATURAL RESOURCES IMPACT**

- § 75:43 Agriculture and pesticides
- § 75:44 Aquaculture
- § 75:45 Soil depletion run-off pollution/desertification process
- § 75:46 Ocean and marine coastal resources
- § 75:47 Silviculture/forests and fauna protection
- § 75:48 Mining, hydrocarbons and energy production

### **X. LAND USE**

- § 75:49 Urban/Suburban

- § 75:50 Historic and cultural preservation
- § 75:51 Transportation system: Roadbuilding and regulation of gasoline
- § 75:52 Housing
- § 75:53 Noise

## **XI. PUBLIC HEALTH**

- § 75:54 Drinking water
- § 75:55 Food purity

## **XII. NATURE**

- § 75:56 Parks and wild areas protection
- § 75:57 Biological diversity
- § 75:58 Species conservation
- § 75:59 Fishing activities
- § 75:60 Wetlands

## **XIII. OTHER ENVIRONMENTAL CONSIDERATIONS**

- § 75:61 Indigenous populations
- § 75:62 Workers' protection
- § 75:63 Climate change

## **XIV. CONCLUSION**

- § 75:64 In general

# **CHAPTER 76. ENVIRONMENTAL LAW OF THE PHILIPPINES—BY ANTONIO A. OPOSA & MA. ALETA C. NUÑEZ**

## **I. LEGAL SYSTEM**

- § 76:1 Government structure
- § 76:2 Laws and regulations
- § 76:3 —Laws
- § 76:4 —Executive Orders
- § 76:5 —Proclamation
- § 76:6 —Administrative Order
- § 76:7 —Memorandum circulars / Memorandum order
- § 76:8 —Ordinance
- § 76:9 Environmental authorities: Department of Environment and Natural Resources (DENR)
- § 76:10 Environmental authorities: Attached agencies of DENR—National Mapping and Resource Information Authority (NAMRIA)
- § 76:11 —Natural Resources Development Corporation (NRDC)
- § 76:12 —Laguna Lake Development Authority (LLDA)



## TABLE OF CONTENTS

- § 76:13 —Palawan Council for Sustainable Development (PCSD)
- § 76:14 Local government units (LGU)
- § 76:15 Environmental courts

## II. THE CONSTITUTION AND THE ENVIRONMENT

- § 76:16 In general
- § 76:17 Right to a balanced and healthful ecology
- § 76:18 Regalian doctrine
- § 76:19 Social justice
- § 76:20 Local autonomy and public participation
- § 76:21 Right of access to information

## III. INTERNATIONAL ENVIRONMENTAL TREATIES RATIFIED BY THE PHILIPPINES

- § 76:22 International agreements relating to the environment in general

## IV. LAWS ON NATURAL RESOURCES

- § 76:23 Forestry
- § 76:24 —Policies, objectives and scope
- § 76:25 —Governing bodies
- § 76:26 —Access to resources
- § 76:27 —Forest protection and reforestation
- § 76:28 —Prohibited acts and omissions
- § 76:29 Protected areas and biodiversity (including cave management, biosafety in biotechnology and organic agriculture)
- § 76:30 —Policies, objectives and scope
- § 76:31 —Governing bodies
- § 76:32 —Establishment and management of protected areas and wildlife
- § 76:33 —Environmental safeguards
- § 76:34 —Prohibited acts and omissions
- § 76:35 Fisheries—Policies, objectives and scope
- § 76:36 —Governing bodies
- § 76:37 —Exclusive use of Filipinos; use and management of fishery resources
- § 76:38 —Prohibited acts and omissions
- § 76:39 Mining
- § 76:40 —Policies, objectives and scope
- § 76:41 —Governing bodies
- § 76:42 —Access to, use, and management of resources
- § 76:43 —Environmental and social safeguards and reforms in the mining sector
- § 76:44 —Prohibited acts and omissions
- § 76:45 Renewable energy & biofuels
- § 76:46 —Policies, objectives and scope

- § 76:47 —Governing / regulating bodies
- § 76:48 — —Stakeholder participation
- § 76:49 —Development and advancement of renewable energy and biofuels
- § 76:50 —Market regulation and standards: Blending requirements
- § 76:51 —Environmental & social safeguards
- § 76:52 —Incentives
- § 76:53 —Prohibited acts and omissions

## V. ENVIRONMENTAL LAWS

- § 76:54 Philippine Environment Code
- § 76:55 —Polluters pay & clean-up
- § 76:56 Philippine environmental policy
- § 76:57 —Policies, objectives and scope
- § 76:58 —Governing / regulating bodies
- § 76:59 —Regulation and safeguards: EIS requirement
- § 76:60 Environmental impact statement system
- § 76:61 Clean Air Act—Policies, objectives and scope
- § 76:62 —Governing / regulating bodies
- § 76:63 —Regulation and safeguards
- § 76:64 — —Air pollution clearances and permits for stationary sources
- § 76:65 — —Pollution from stationary sources
- § 76:66 — —Ban on incineration
- § 76:67 — —Pollution from motor vehicles
- § 76:68 — —Pollution from other sources
- § 76:69 — —Regulation of fuels and additives
- § 76:70 — —Regulation of other pollutants
- § 76:71 —Prohibited acts and omissions
- § 76:72 Clean Water Act
- § 76:73 —Policies, objectives and scope
- § 76:74 —Governing / regulating bodies
- § 76:75 —Regulation and safeguards—Water quality management areas
- § 76:76 — —Non-attainment areas
- § 76:77 — —National sewerage and septage management program
- § 76:78 — —Domestic sewage collection, treatment and disposal
- § 76:79 — —Water pollution permits and charges
- § 76:80 — —Financial liability mechanism
- § 76:81 — —Clean-up operations
- § 76:82 — —Programmatic environmental impact assessment
- § 76:83 —Prohibited acts and omissions
- § 76:84 Ecological Solid Waste Management Act—Policies, objectives and scope
- § 76:85 —Governing / regulating bodies
- § 76:86 —Regulation and safeguards

## TABLE OF CONTENTS

§ 76:87	—Prohibited acts and omissions
§ 76:88	Toxic and hazardous substances—Policies, objectives and scope
§ 76:89	—Governing / regulating bodies
§ 76:90	—Regulation of chemical substances
§ 76:91	—Prohibited acts and omissions
§ 76:92	Oil Pollution Compensation Law
§ 76:93	—Policies, objectives and scope
§ 76:94	—Institutional mechanism, governing / regulating bodies
§ 76:95	—Regulation and enforcement—Strict liability
§ 76:96	— —Compulsory insurance and certification
§ 76:97	— —Contributions to the International Oil Pollution Compensation (IOPC) fund
§ 76:98	— —Action for compensation
§ 76:99	—Prohibited acts and omissions
§ 76:100	Climate Change Act—Policies, objectives and scope
§ 76:101	—Governing / regulating bodies
§ 76:102	—National Framework Strategy and National Action Plan
§ 76:103	Disaster Risk Reduction and Management Act
§ 76:104	—Policies, objectives and scope
§ 76:105	—Responsible agencies
§ 76:106	—National disaster risk reduction and management framework and plan
§ 76:107	—Funding

## VI. COMPLIANCE AND ENFORCEMENT

§ 76:108	Permitting and regulation: National agencies and local governments
§ 76:109	Compliance and enforcement

Appendix 76A. List of Significant Environmental Laws

## CHAPTER 77. ENVIRONMENTAL LAW OF QATAR—BY LINDA FESTERMAKER

### I. INTRODUCTION

§ 77:1	In general
§ 77:2	Country facts

### II. THE GOVERNMENT OF QATAR

§ 77:3	In general
§ 77:4	Branches of government
§ 77:5	—Executive branch
§ 77:6	—Legislative branch
§ 77:7	—Judicial branch
§ 77:8	Qatar’s legal system

### **III. QATAR AND ITS ENVIRONMENT**

- § 77:9 Qatar's natural resources
- § 77:10 The Islamic approach to environmental conservation
- § 77:11 Qatar's environmental governance
- § 77:12 Qatar's environmental strategy
- § 77:13 —Cleaner water and sustainable use
- § 77:14 —Cleaner air and reduced greenhouse gas emissions
- § 77:15 —Reduced waste, increase recycling and efficient use
- § 77:16 —Protection of nature and natural heritage
- § 77:17 —More sustainable urbanization and a healthier living environment
- § 77:18 —An environmentally-aware public

### **IV. CONCLUSION**

- § 77:19 In general

## **CHAPTER 78. ENVIRONMENTAL LAW OF ROMANIA—BY DANIELA RAȚ, VICTOR FERCEA**

### **I. INTRODUCTION TO THE LEGAL SYSTEM OF ROMANIA**

- § 78:1 In general
- § 78:2 The executive
- § 78:3 The legislature
- § 78:4 The judiciary
- § 78:5 The Ministry of Environment
- § 78:6 Legal representation

### **II. FUNDAMENTAL ASPECTS OF ROMANIAN ENVIRONMENTAL LAW**

- § 78:7 Historical background
- § 78:8 Constitutional provisions
- § 78:9 Environmental rights and principles
- § 78:10 National strategy regarding the environment

### **III. ENVIRONMENTAL LEGISLATION**

- § 78:11 Environmental protection
- § 78:12 —Air
- § 78:13 —Water
- § 78:14 —Forests
- § 78:15 —Soil
- § 78:16 —Noise
- § 78:17 —Hazardous substances
- § 78:18 —Waste management

## TABLE OF CONTENTS

- § 78:19 —Biodiversity
- § 78:20 —Genetically modified organisms
- § 78:21 —Energy

### **IV. OTHER ASPECTS OF ROMANIAN ENVIRONMENTAL LAW**

- § 78:22 EU harmonization and international agreements
- § 78:23 Public participation in environmental decision making
- § 78:24 Environmental Impact Assessment
- § 78:25 Enforcement

### **V. CONCLUSION**

- § 78:26 In general

## **CHAPTER 79. ENVIRONMENTAL LAW OF THE RUSSIAN FEDERATION—BY IRINA O. KRASNOVA**

### **I. INTRODUCTION TO THE EVOLVING RUSSIAN CONSTITUTION**

- § 79:1 In general
- § 79:2 Constitutional provisions on the environment

### **II. ADMINISTERING ENVIRONMENTAL LAW**

- § 79:3 Institutional system of the Russian Federation

### **III. RUSSIAN ENVIRONMENTAL LAW**

- § 79:4 In general
- § 79:5 Overview of environmental law in the Russian Federation—Law on environmental protection
- § 79:6 Environmental quality standards and pollution limitations, pollution charges and best available techniques
- § 79:7 State ecological expert review of planned activities
- § 79:8 Specially protected areas law
- § 79:9 Legislative approaches to air pollution
- § 79:10 Legislative approaches to water pollution
- § 79:11 Regulation of solid wastes management
- § 79:12 Regulation of radioactive wastes management and of nuclear energy
- § 79:13 Regulation in addressing climate change and Energy Law

### **IV. NATURAL RESOURCES LAW**

- § 79:14 Overview of environmental law in the Russian Federation—Natural resources legislation
- § 79:15 Land use regulation

- § 79:16 Legislation on minerals
- § 79:17 Forest resources law
- § 79:18 Wildlife legislation
- § 79:19 Water Use Regulation

## **V. ENFORCEMENT AND JUDICIAL REVIEW**

- § 79:20 In general
- § 79:21 Liabilities
- § 79:22 Environmental and natural resource damages

# **CHAPTER 80. ENVIRONMENTAL LAW OF SERBIA—BY DR. MIRJANA DRENOVAK-IVANOVIC**

## **I. INTRODUCTION**

- § 80:1 General overview

## **II. SERBIA'S LEGAL SYSTEM**

- § 80:2 Governmental structure
- § 80:3 Judicial system
- § 80:4 Administration and enforcement

## **III. FUNDAMENTAL ASPECTS OF SERBIAN ENVIRONMENTAL LAW**

- § 80:5 Environmental policies and principles
- § 80:6 Environmental law system
- § 80:7 Environmental information

## **IV. ENVIRONMENTAL PERMITS**

- § 80:8 General overview
- § 80:9 Integrated permits
- § 80:10 —Public participation and issuing integrated permits
- § 80:11 —The competent authority for issuing integrated permit and permit review
- § 80:12 —Legal remedies
- § 80:13 Other environmental permits

## **V. ENVIRONMENTAL LIABILITY**

- § 80:14 General overview
- § 80:15 *Actio popularis*
- § 80:16 Indemnity for non-material damage for mental anguish sustained due to negative environmental impact of industrial and adjacent facilities
- § 80:17 Other forms of environmental liability

## **VI. EMISSION TRADING AND CLIMATE CHANGE**

- § 80:18 Climate change

## TABLE OF CONTENTS

- § 80:19 Emission trading schemes
- § 80:20 —Monitoring and reporting on greenhouse gas emissions
- § 80:21 —Greenhouse gas emission units trade in the aviation sector

## VII. OTHER ASPECTS OF ENVIRONMENTAL LAW

- § 80:22 Asbestos
- § 80:23 Water Law
- § 80:24 Waste management
- § 80:25 Genetically Modified Organisms (GMO)

Appendix 80A. List of Significant Environmental Laws

## CHAPTER 81. ENVIRONMENTAL LAW OF SINGAPORE—BY LYE LIN-HENG

### I. OVERVIEW OF SINGAPORE AND ITS ENVIRONMENT

- § 81:1 Geography and people
- § 81:2 History
- § 81:3 Economy
- § 81:4 The environment
- § 81:5 Environmental management
- § 81:6 —(1) Land Use Planning and Pollution Control
- § 81:7 —(2) Enforcement
- § 81:8 —(3) Monitoring

### II. OVERVIEW OF SINGAPORE'S LEGAL SYSTEM

- § 81:9 Government
- § 81:10 Legal system and sources of law
- § 81:11 —English common law
- § 81:12 —National laws
- § 81:13 —Application to environmental harm
- § 81:14 —“Soft” laws

### III. ADMINISTRATION

- § 81:15 The administrative structure
- § 81:16 The planning process
- § 81:17 —Principles used in planning
- § 81:18 —Pollutive land uses
- § 81:19 —Environmental Impact Assessments (EIA)
- § 81:20 Implementation—NEA's role in the planning process
- § 81:21 —NEA's role in the construction of buildings
- § 81:22 The control of vehicular traffic—Economic disincentives
- § 81:23 —Green vehicles
- § 81:24 Control of factory premises and workplaces

**IV. POLLUTION LAWS**

- § 81:25 Common law actions in tort
- § 81:26 —Nuisance
- § 81:27 —Negligence
- § 81:28 —Rule in *Rylands v. Fletcher*
- § 81:29 National laws—Air pollution
- § 81:30 — —Emissions from stationary sources
- § 81:31 — — —Scheduled Premises
- § 81:32 — — —Control of air emissions
- § 81:33 — — —Control of fuel quality
- § 81:34 — — —Tax incentives
- § 81:35 — —Emissions from vehicular sources
- § 81:36 — —Emissions from other sources
- § 81:37 — —Indoor air quality—Prohibition against smoking in public places
- § 81:38 — — —Factory air quality
- § 81:39 — — —Office air quality
- § 81:40 — —Emissions from other sources—Transboundary air pollution
- § 81:41 — —Ozone depletion and climate change
- § 81:42 — — —CDM projects
- § 81:43 — — —Carbon pricing
- § 81:44 — — —Energy and resource efficiency
- § 81:45 — — —Energy Conservation Act (ECA), 2012
- § 81:46 —Water pollution
- § 81:47 — —Sewage
- § 81:48 — —Toxic substances
- § 81:49 — —Trade effluent
- § 81:50 —Solid waste management
- § 81:51 — —Legislation
- § 81:52 — —Waste collection
- § 81:53 — —Illegal dumping
- § 81:54 — —Littering
- § 81:55 — —Cleanliness of public areas
- § 81:56 — —Industrial waste and toxic industrial waste
- § 81:57 — — —Solid residues and fly-ash
- § 81:58 — — —Biohazardous wastes
- § 81:59 — — —Disposal of asbestos wastes
- § 81:60 — — —Offences
- § 81:61 — — —Electronic tracking of wastes
- § 81:62 — — —Transboundary movement of hazardous wastes: The Basel Convention
- § 81:63 — — —The Stockholm Convention on Persistent Organic Pollutants (POPs)
- § 81:64 — — —The Rotterdam Convention on Prior Informed Consent (PIC)
- § 81:65 — —Radioactive waste
- § 81:66 — — —Radiation Protection Act



## TABLE OF CONTENTS

- § 81:67 — — —The Radiation Protection Regulations
- § 81:68 —The Minamata Convention on Mercury
- § 81:69 —Soil contamination
- § 81:70 —Poisons
- § 81:71 —Toxic and hazardous substances
- § 81:72 — —Import, export, sale, storage and use of hazardous substances
- § 81:73 — —Transport of hazardous substances
- § 81:74 — —Enforcement and offences
- § 81:75 — —Regional collaboration
- § 81:76 — —Petroleum and flammable materials
- § 81:77 —Arms and explosives
- § 81:78 —Noise
- § 81:79 — —Vehicular traffic and mass rail transit
- § 81:80 — —Noise from construction
- § 81:81 — —Noise within factories and industrial premises
- § 81:82 — —Aircraft
- § 81:83 — —Noise as a public nuisance
- § 81:84 — —Noise monitoring
- § 81:85 —Marine pollution
- § 81:86 — —MARPOL
- § 81:87 — —Offences
- § 81:88 — —Bulk oil tankers
- § 81:89 — — —Tanker cleaning and the disposal of sludge and slop oil
- § 81:90 — — —Carriage of dangerous goods

## V. CONSERVATION LAWS

- § 81:91 Conservation of the built environment
- § 81:92 Parks and nature reserves
- § 81:93 Protection of flora and fauna in National Parks and nature reserves
- § 81:94 Protection for trees and plants in National Parks and nature reserves
- § 81:95 Protection of flora and fauna within a public park
- § 81:96 —Protection of fauna within a public park
- § 81:97 —Protection of flora within a public park
- § 81:98 Protection of wildlife in other parts of Singapore
- § 81:99 Protection of flora
- § 81:100 Protection of marine life
- § 81:101 International and regional agreements—Endangered species (CITES)
- § 81:102 —ASEAN Agreement on the Conservation of Nature and Natural Resources
- § 81:103 —Convention on Biological Diversity

## VI. CHALLENGES AHEAD

- § 81:104 The development versus conservation dilemma

- § 81:105 Climate change
- § 81:106 Energy and resource efficiency
- § 81:107 Help for small island developing states
- § 81:108 Singapore at COP 26, Glasgow, November 2021
- § 81:109 Singapore's 2030 Green Plan

## **CHAPTER 82. ENVIRONMENTAL LAW OF THE SLOVAK REPUBLIC—BY MAREK PRÍTYI, KIRK W. JUNKER**

### **I. INTRODUCTION**

- § 82:1 In general

### **II. OVERVIEW OF THE LEGAL SYSTEM**

- § 82:2 Nature of the legal system
- § 82:3 Constitution
- § 82:4 Governmental structure
- § 82:5 Bodies of state administration in the field of environmental protection
  - § 82:6 —Ministry of the Environment
  - § 82:7 —Ministry of Agriculture and Rural Development
  - § 82:8 —The Slovak Inspectorate of Environment
  - § 82:9 —The Slovak Environmental Agency
  - § 82:10 —State Environmental Protection Agency of the Slovak Republic
  - § 82:11 —Environmental Fund of the Slovak Republic
- § 82:12 State administrative bodies in the environmental protection field at the local level
- § 82:13 The Slovak Republic's Court System

### **III. THE SLOVAK REPUBLIC'S ENVIRONMENTAL LAW SYSTEM**

- § 82:14 Overview
- § 82:15 General legislation—Act on the Environment
  - § 82:16 —Environmental Impact Assessment
- § 82:17 Sectoral legislation—Protection of land and nature
- § 82:18 Protected areas
  - § 82:19 —Wild fauna and flora species protection
  - § 82:20 —Forests
- § 82:21 Agriculture
- § 82:22 Renewable energy
- § 82:23 Air quality
- § 82:24 Emission Trading Scheme
- § 82:25 Water
- § 82:26 Waste
- § 82:27 Cultural heritage

## TABLE OF CONTENTS

### **IV. PRACTICAL CONSIDERATIONS**

- § 82:28 Finding the law
- § 82:29 Citizen groups
- § 82:30 —Pezinok case
- § 82:31 —The Lesoochránárske združenie VLK case

### **V. CONCLUSION**

- § 82:32 In general

### **VI. BIBLIOGRAPHY**

- § 82:33 Literature and related sources available online
- § 82:34 National law
- § 82:35 International treaties
- § 82:36 Jurisprudence
- § 82:37 Legislation of the European Union
- § 82:38 List of information sources and online databases

## **CHAPTER 83. ENVIRONMENTAL LAW OF SLOVENIA—BY MLADA MIRKOVIC**

### **I. INTRODUCTION: ABOUT THE COUNTRY AND LEGAL TRADITION**

- § 83:1 In general

### **II. OVERVIEW OF THE SLOVENIAN LEGAL SYSTEM**

- § 83:2 In general
- § 83:3 Constitution
- § 83:4 —Constitutional environmental rights
- § 83:5 Governmental structure—National government
- § 83:6 — —Bodies of Parliament and national government dealing with environmental protection issues
- § 83:7 — —Structure of the Ministry of the Environment and Physical Planning
- § 83:8 —Local government
- § 83:9 —Judiciary
- § 83:10 Types of law
- § 83:11 Adherence to international environmental treaties

### **III. ENVIRONMENTAL LAWS**

- § 83:12 In general
- § 83:13 Pollution control—Protection of water
- § 83:14 —Air pollution control
- § 83:15 —Soil pollution and hazardous substances control
- § 83:16 Natural resources impact
- § 83:17 —Silvaculture and hunting

- § 83:18 Public health—Protection of drinking water
- § 83:19 Nature protection
- § 83:20 Land-use planning

#### **IV. ENVIRONMENTAL PROTECTION RESEARCH, PROGRAMMING AND PLANNING**

- § 83:21 Environmental research
- § 83:22 National Environmental Protection Program
- § 83:23 Environmental vulnerability study
- § 83:24 Comprehensive Environmental Impact Assessment study
- § 83:25 Environmental Impact Assessment (“EIA”)

#### **V. ACCESS TO ENVIRONMENTAL INFORMATION**

- § 83:26 In general
- § 83:27 Environmental Protection Council
- § 83:28 Annual environmental report
- § 83:29 Ecological record keeping
- § 83:30 Environmental monitoring
- § 83:31 Environmental protection information system
- § 83:32 International exchange of information

#### **VI. PUBLIC PARTICIPATION IN ENVIRONMENTAL DECISION-MAKING**

- § 83:33 Public participation in policy-making
- § 83:34 Public participation in the EIA process
- § 83:35 Public participation in the process of land-use planning

#### **VII. ENFORCEMENT OF ENVIRONMENTAL LAWS**

- § 83:36 Criminal enforcement—Criminal Code
- § 83:37 —Environmental Protection Act
- § 83:38 Administrative enforcement—Inspection
- § 83:39 Civil enforcement
- § 83:40 —Liability for damage
- § 83:41 —Nature of claims
- § 83:42 —Restriction of compensation for damage
- § 83:43 —Transfers of ownership
- § 83:44 —Neighborhood nuisances
- § 83:45 Citizens’ enforcement—Civil actions
- § 83:46 —Participation in administrative procedure/judicial review

### **CHAPTER 84. ENVIRONMENTAL LAW OF SOUTH AFRICA—BY HENNIE STRYDOM**

#### **I. INTRODUCTION**

- § 84:1 General

TABLE OF CONTENTS

**II. OVERVIEW OF GOVERNMENT STRUCTURE AND  
LEGAL SYSTEM**

§ 84:2 Government structure

§ 84:3 Legal system

**III. LEGAL PROTECTION OF THE ENVIRONMENT**

§ 84:4 The constitutional framework

§ 84:5 Framework legislation

§ 84:6 Other environmental legislation

§ 84:7 Mineral resources: a special case

§ 84:8 Implementation, compliance, and enforcement—The duty  
of care

§ 84:9 —Governmental directives

§ 84:10 —Judicial review and remedies

§ 84:11 —Protection of employees

§ 84:12 —Protection of whistle-blowers

§ 84:13 —Control of incidents and emergency situations

§ 84:14 —*Locus standi* in enforcing environmental laws

§ 84:15 —Powers of environmental management inspectors

§ 84:16 —Private prosecution

§ 84:17 —Criminal proceedings

§ 84:18 —Compliance through agreements

**IV. CLIMATE CHANGE**

§ 84:19 In general

**V. THE POACHING PROBLEM**

§ 84:20 In general

**CHAPTER 85. ENVIRONMENTAL LAW OF THE  
STATE OF SOUTH AUSTRALIA—BY MINDY L.  
JAYNE**

**I. INTRODUCTION**

§ 85:1 In general

**II. SOUTH AUSTRALIA AND THE ENVIRONMENT**

§ 85:2 In general

**III. ENVIRONMENTAL LAW IN SOUTH AUSTRALIA**

§ 85:3 Main statutory provisions

§ 85:4 —Environmental Protection Act

§ 85:5 —Development Act

§ 85:6 —Water Resources Act

- § 85:7 —Coast Protection Act
- § 85:8 Sectoral laws
- § 85:9 —Aboriginal communities
- § 85:10 —Waste and pollution prevention
- § 85:11 —Water
- § 85:12 —Atmosphere
- § 85:13 —Wildlife
- § 85:14 —Parks

#### **IV. ADMINISTRATION, IMPLEMENTATION AND ENFORCEMENT OF ENVIRONMENTAL LAW IN SOUTH AUSTRALIA**

- § 85:15 Administering environmental protection—Department for Environment, Heritage and Aboriginal Affairs
- § 85:16 —Environment Protection Agency
- § 85:17 —Division of State Aboriginal Affairs
- § 85:18 Implementing environmental protection—General environmental duty
- § 85:19 —Regulations and Environmental Protection Policies
- § 85:20 —Offences
- § 85:21 Enforcement
- § 85:22 —Enforcement actions
- § 85:23 —Remedies

#### **V. CONCLUSION**

- § 85:24 In general

### **CHAPTER 86. ENVIRONMENTAL LAW OF SOUTH KOREA—BY TAE HEE LEE, SENIOR PARTNER**

#### **I. INTRODUCTION**

- § 86:1 In general

#### **II. OVERVIEW OF SOUTH KOREA'S LEGAL SYSTEM**

- § 86:2 Governmental structure
- § 86:3 Statutory, common, and other laws
- § 86:4 Judicial system
- § 86:5 —Tort actions
- § 86:6 Regulatory authorities
- § 86:7 Enforcement authorities

#### **III. ENVIRONMENTAL LAWS AND REGULATIONS**

- § 86:8 In general
- § 86:9 Waste regulation

## TABLE OF CONTENTS

- § 86:10 Air pollution
- § 86:11 Water pollution
- § 86:12 —Fresh water pollution
- § 86:13 —Marine pollution
- § 86:14 Toxic substances
- § 86:15 Pesticides and herbicides
- § 86:16 Noise and vibrations
- § 86:17 Land use
- § 86:18 Employee protection
- § 86:19 Biotechnology regulation
- § 86:20 Medical waste
- § 86:21 Soil contamination
- § 86:22 Radioactive contamination

## IV. IMPLEMENTATION OF ENVIRONMENTAL LAWS

- § 86:23 Structure of environmental authority
- § 86:24 Enforcement
- § 86:25 —Administrative actions
- § 86:26 —Criminal actions
- § 86:27 —Civil suits

## V. PRACTICAL CONSIDERATIONS

- § 86:28 In general
- § 86:29 Dealing with regulatory authorities and enforcement authorities
- § 86:30 Citizen groups
- § 86:31 Obtaining permits
- § 86:32 Risk assessment
- § 86:33 The impact of environmental laws on business transactions
- § 86:34 Sophistication level of environmental support
- § 86:35 Secondary authorities on environmental laws

## VI. CONCLUSION

- § 86:36 In general
- Appendix 86A. Significant Environmental Laws

# CHAPTER 87. ENVIRONMENTAL LAW OF SPAIN—BY MAR CAMPINS ERITJA AND ANTONI PIGRAU SOLÉ

## I. INTRODUCTION

- § 87:1 General framework

## II. SPAIN'S HISTORICAL AND POLITICAL BACKGROUND

- § 87:2 Political landscape

§ 87:3 Social and economic aspects

### III. ENVIRONMENTAL LAW FRAMEWORK

- § 87:4 Environmental law prior to the 1978 Spanish Constitution
- § 87:5 The 1978 Spanish Constitution
- § 87:6 Environmental competences of the State government
- § 87:7 —Ministry of the Environment
- § 87:8 Environmental competences of the autonomous communities
- § 87:9 Environmental competences of municipal governments
- § 87:10 European Union influence on Spanish environmental law
- § 87:11 International agreements

### IV. SUBJECTS OF ENVIRONMENTAL LAW

- § 87:12 In general
- § 87:13 Environmental protection and pollution control—Air
- § 87:14 —wastes and polluted soils wastes
- § 87:15 —Water quality
- § 87:16 — —Distribution of competences among State, regional and local authorities
- § 87:17 — —Applicable legislation
- § 87:18 — —Administrative organization
- § 87:19 — —Primary means of water protection
- § 87:20 — — —Determining water as a resource in the public domain
- § 87:21 — — —Establishing specific easements and limitations on private property bordering public domain water resources
- § 87:22 — — —Water management planning
- § 87:23 — — —Advance monitoring of the use and exploitation of water resources: statements of liability, administrative authorisation and concessions
- § 87:24 — — —Authorisation for waste discharge
- § 87:25 — — —Waste discharge tax
- § 87:26 — — —Techniques of a repressive nature
- § 87:27 —Coastal management
- § 87:28 —Biodiversity and natural spaces
- § 87:29 — —Protected natural areas
- § 87:30 — — —Parks
- § 87:31 — — —Nature reserves
- § 87:32 — — —Marine protected areas
- § 87:33 — — —Natural monuments
- § 87:34 — — —Protected landscapes
- § 87:35 — — —Other protective mechanisms
- § 87:36 — —Wildlife protection
- § 87:37 — —Forests
- § 87:38 —Climate change
- § 87:39 —Environmental impact evaluation



## TABLE OF CONTENTS

- § 87:40 Citizen rights: Access to information, participation, and to justice
- § 87:41 Enforcement
- § 87:42 —Administrative liability
- § 87:43 —Civil liability
- § 87:44 —Criminal liability
- § 87:45 —Environmental liability
- Appendix 87A. Selected Bibliography

## **CHAPTER 88. ENVIRONMENTAL LAW OF SRI LANKA—BY NAAZIMA KAMARDEEN AND KAUSHALYA PREMACHANDRA**

### **I. INTRODUCTION**

- § 88:1 General comments

### **II. THE LEGAL SYSTEM OF SRI LANKA: AN OVERVIEW**

- § 88:2 Governmental structure
- § 88:3 Judicial system
- § 88:4 Administration and enforcement

### **III. FUNDAMENTAL ASPECTS OF SRI LANKAN ENVIRONMENTAL LAW**

- § 88:5 Environmental policies and principles
- § 88:6 Environmental laws in Sri Lanka
- § 88:7 Environmental information

### **IV. ENVIRONMENTAL PERMITS**

- § 88:8 In general
- § 88:9 The Environmental Impact Assessment
- § 88:10 The Environmental Protection Licence
- § 88:11 Other environmental permits
- § 88:12 Legal remedies
- § 88:13 Powers of the Authority with regard to environmental permits and environmental liability

### **V. INDUSTRIAL WASTE MANAGEMENT AND POLLUTION CONTROL**

- § 88:14 Environmental protection and quality standards for soil, water and air
- § 88:15 —Control of pollution of the soil
- § 88:16 —Control of pollution of the water
- § 88:17 —Control of pollution of the atmosphere
- § 88:18 Hazardous and solid waste management

- § 88:19 Liability and clean-up measures
- § 88:20 Preventive measures and information duties

## **VI. EMISSION TRADING AND CLIMATE CHANGE**

- § 88:21 Clean development mechanism and carbon trading
- § 88:22 Climate change

## **VII. MONITORING, LIABILITIES, AND ENVIRONMENTAL INSURANCE**

- § 88:23 Inspections and monitoring
- § 88:24 Environmental liabilities and criminal penalties—  
Statutory liabilities
- § 88:25 —Private nuisance
- § 88:26 —Public nuisance
- § 88:27 Environmental insurance

## **VIII. IMPACT OF ENVIRONMENTAL LAW ON BUSINESS TRANSACTIONS**

- § 88:28 In general

Appendix 88A. List of Significant Environmental Laws and Regulations

# **CHAPTER 89. ENVIRONMENTAL LAW OF THAILAND—BY AJARNNOI SINGKANONGNA**

## **I. OVERVIEW OF THAILAND**

- § 89:1 In general
- § 89:2 The Geography of Thailand
- § 89:3 People of Thailand
- § 89:4 Agriculture
- § 89:5 Industry
- § 89:6 Thailand's government—Constitutional monarchy
- § 89:7 Thailand's government—National Assembly
- § 89:8 Thailand's government—Ministers
- § 89:9 —Courts
- § 89:10 — —Constitutional Court
- § 89:11 — —Court of Justice
- § 89:12 — —Administrative Court
- § 89:13 Environmental conditions in Thailand
- § 89:14 —Water
- § 89:15 —Air
- § 89:16 —Acid rain
- § 89:17 —Hazardous wastes
- § 89:18 —Deforestation
- § 89:19 —Biodiversity

## TABLE OF CONTENTS

### **II. THAILAND'S ENVIRONMENTAL LAWS**

- § 89:20 National Environment Board (NEB)
- § 89:21 Environmental Fund
- § 89:22 Recognition of the public's role and acceptance of the roles of NGOs
- § 89:23 Environmental management and Environmental Quality Management Plan
- § 89:24 Environmental Impact Assessment
- § 89:25 Pollution
- § 89:26 —Air and noise pollution
- § 89:27 —Water pollution
- § 89:28 —Hazardous materials

#### **Bibliography**

### **CHAPTER 90. POLLUTION LAWS OF THAILAND—BY AMNAT WONGBANDIT**

#### **I. OVERVIEW OF THAILAND AND ITS ENVIRONMENT**

- § 90:1 Geography and people
- § 90:2 Economy
- § 90:3 The environment

#### **II. OVERVIEW OF THAILAND'S LEGAL SYSTEM**

- § 90:4 Thailand is a civil law system country
- § 90:5 Hierarchy of law
- § 90:6 Law-making bodies
- § 90:7 Judicial system

#### **III. OVERVIEW OF THAILAND'S ADMINISTRATIVE STRUCTURE**

- § 90:8 National administration
- § 90:9 Regional administration
- § 90:10 Local administration
- § 90:11 National planning

#### **IV. ENVIRONMENTAL LAW**

- § 90:12 Environmental law as a system of laws
- § 90:13 Constitution
- § 90:14 Administrative law
- § 90:15 Framework legislation of environmental law
- § 90:16 The Environment Board
- § 90:17 Pollution Control Committee
- § 90:18 Environmental quality standards
- § 90:19 Emission and effluent standards
- § 90:20 Waste treatment

- § 90:21 Environmental impact assessment
- § 90:22 Steps of submitting and reviewing of EIA reports
- § 90:23 Problems in environmental impact assessment
- § 90:24 Environmentally protected areas
- § 90:25 Pollution control area
- § 90:26 Pollution laws
- § 90:27 Water pollution
- § 90:28 Air and noise pollution and vibration
- § 90:29 Soil contamination
- § 90:30 Solid waste management
- § 90:31 Civil liability
- § 90:32 Claims under the Law of Torts
- § 90:33 Claims under special laws

## **V. CONCLUSION**

- § 90:34 In general

# **CHAPTER 91. ENVIRONMENTAL LAW OF TIMOR-LESTE—BY MURILO NUNES DE BUSTAMANTE**

## **I. OVERVIEW**

- § 91:1 In general
- § 91:2 History
- § 91:3 Geography
- § 91:4 Environmental issues

## **II. FUNDAMENTAL LAW**

- § 91:5 Background
- § 91:6 Constitution
- § 91:7 Legal system

## **III. TREATIES**

- § 91:8 In general

## **IV. GOVERNMENTAL SYSTEM**

- § 91:9 In general

## **V. SUBJECTS OF SUBSTANTIVE ENVIRONMENTAL LAW**

- § 91:10 Marine resources
- § 91:11 Forestry
- § 91:12 Pollution
- § 91:13 Protected wild areas
- § 91:14 Endangered species

## TABLE OF CONTENTS

- § 91:15 Wetlands
- § 91:16 Mangrove areas
- § 91:17 Water resources
- § 91:18 Energy generation
- § 91:19 Environmental crimes

## VI. SUBJECTS OF PROCEDURAL ENVIRONMENTAL LAW

- § 91:20 Governmental organization
- § 91:21 Reporting, publication and dissemination of environmental information
- § 91:22 Environmental Impact Assessment
- § 91:23 Public Prosecution Service

## VII. CONCLUSION

- § 91:24 In general

## CHAPTER 92. ENVIRONMENTAL LAW OF UKRAINE

### I. INTRODUCTION

- § 92:1 Overview of the legal system of the Ukraine
- § 92:2 Commonwealth of Independent States
- § 92:3 International law obligations
- § 92:4 Contamination and pollution conditions
- § 92:5 Chernobyl

### II. THE FRAMEWORK OF ENVIRONMENTAL LAW

- § 92:6 In general
- § 92:7 The Environmental Protection Law
- § 92:8 —General provisions
- § 92:9 —Rights and duties of citizens
- § 92:10 —Functions of government bodies
- § 92:11 —Management of protection of the environment
- § 92:12 —Monitoring and recording rules
- § 92:13 —Ecological assessments
- § 92:14 —Establishment of environmental standards and norms
- § 92:15 —Enforcement authority
- § 92:16 —Utilization of natural resources
- § 92:17 —Economic mechanism for the environmental program
- § 92:18 —Provisions regarding specific activities—Chemical fertilizers and other basic plant agents
- § 92:19 — —Micro-organisms and biologically active substances
- § 92:20 — —Acoustics, electromagnetic, ionizing, and radioactive contamination
- § 92:21 — —Transport facilities

- § 92:22 — —Performance of scientific research
- § 92:23 — —Military and defense facilities and activities
- § 92:24 Other Ukrainian statutes—Nature protection
- § 92:25 —The Land Code
- § 92:26 —Air regulation
- § 92:27 —Disclosure
- § 92:28 Residual USSR legislation in force
- § 92:29 —Water Law
- § 92:30 —Flora and fauna
- § 92:31 —Forestry
- § 92:32 —Land
- § 92:33 —Minerals
- § 92:34 —Environmental Impact Assessment

### **III. PRACTICAL CONSIDERATIONS**

- § 92:35 In general

## **CHAPTER 93. ENVIRONMENTAL LAW OF THE UNITED ARAB EMIRATES—BY SHAKEEL KAZMI**

### **I. INTRODUCTION**

- § 93:1 Overview
- § 93:2 Background
- § 93:3 Economy of UAE
- § 93:4 Education
- § 93:5 Ecological footprints

### **II. OVERVIEW OF THE POLITICAL SYSTEM**

- § 93:6 In general
- § 93:7 Supreme Council of the Federation
- § 93:8 The Council of Ministers
- § 93:9 Federal National Council

### **III. OVERVIEW OF THE LEGAL SYSTEM**

- § 93:10 In general
- § 93:11 The federal judiciary
- § 93:12 Sharia and other courts
- § 93:13 Enforcement of foreign judgments
- § 93:14 Alternate dispute resolution and arbitration
- § 93:15 The legal education and profession

### **IV. OVERVIEW OF EMIRATES**

- § 93:16 Abu Dhabi
- § 93:17 —Flora and fauna

## TABLE OF CONTENTS

- § 93:18 —Masdar
- § 93:19 —Green diesel
- § 93:20 —Al Madaris Al Mustadama
- § 93:21 —Water
- § 93:22 —Dangerous waste residues management project
- § 93:23 — —Abu Dhabi solid waste management project
- § 93:24 — —Madinet Zayed sewage treatment facility upgrade
- § 93:25 —Carbon capture plan
- § 93:26 Dubai
- § 93:27 —Flora and fauna
- § 93:28 —Ras Al Khor wildlife sanctuary
- § 93:29 —Nakheel water treatment plant
- § 93:30 —Dubai waste recycling plant
- § 93:31 —Jebel Ali sewage treatment plant
- § 93:32 —Dubai water treatment plant in the Al Aweer area
- § 93:33 Sharjah
- § 93:34 —Green building
- § 93:35 —Sharjah municipality waste recycling project
- § 93:36 —Sharjah wastewater treatment Phase 6 project
- § 93:37 Ras Al Khaimah
- § 93:38 —Ras Al Khaimah central sewage system project
- § 93:39 —Ras Al Khaimah solid waste management project
- § 93:40 —Wastewater treatment and recycling plant
- § 93:41 Umm Al-Qaiwain
- § 93:42 Umm Al-Quwain—Refuse enclosure for the Umm Al Qaiwain emirate
- § 93:43 Ajman
- § 93:44 —Ajman's sewage project
- § 93:45 Fujairah

## V. ENVIRONMENTAL POLICY

- § 93:46 In general

## VI. ENVIRONMENTAL LAWS

- § 93:47 In general
- § 93:48 Federal environmental laws
- § 93:49 —Federal Law No. 24
- § 93:50 — —The Environmental Impact Assessment (EIA)
- § 93:51 — — —EIA application procedure
- § 93:52 —Federal Law No. (23) for 1999 for Protection of the Marine Environment
- § 93:53 —Federal Law No. (7) of 1993 for the establishment of the Federal Environment Agency
- § 93:54 —UAE Hunting Law: Federal Law No. (9) for 1983

## VII. TREATIES AND ENFORCEMENT

- § 93:55 Enforcement of environmental laws

- § 93:56 Regional environmental agreements
- § 93:57 International conventions and treaties

## **VIII. MAJOR ENVIRONMENTAL THREATS AND THE UAE**

- § 93:58 Urbanization and industrial development
- § 93:59 Coral reefs
- § 93:60 Ecosystems
- § 93:61 Tourism
- § 93:62 Climate change and the UAE

## **IX. PROJECTS**

- § 93:63 In general
- § 93:64 New Global Initiative to Connect Environmental Information Networks (AGEDI)
- § 93:65 Solar energy
- § 93:66 Largest medical waste incinerator
- § 93:67 Masdar
- § 93:68 Airports
- § 93:69 The Zayed prize
- § 93:70 Clean Development Mechanism (CDM)
- § 93:71 Green diesel
- § 93:72 Green buildings
- § 93:73 Water

## **X. NON-GOVERNMENT ENVIRONMENTAL ORGANIZATIONS**

- § 93:74 In general

## **XI. CONCLUSION**

- § 93:75 In general

# **CHAPTER 94. ENVIRONMENTAL LAW OF THE UNITED KINGDOM—BY IAN DOOLITTLE**

## **I. OVERVIEW OF THE UNITED KINGDOM'S LEGAL SYSTEM**

- § 94:1 Governmental structure
- § 94:2 Statutory, common, and other laws
- § 94:3 Relationship between national and local jurisdictions
- § 94:4 Judicial system
- § 94:5 Liability and compensation systems
- § 94:6 Regulatory authorities
- § 94:7 Enforcement Authorities

## **II. ENVIRONMENTAL LAWS**

- § 94:8 Environmental policy



## TABLE OF CONTENTS

§ 94:9	Hazardous waste
§ 94:10	Air pollution
§ 94:11	Water pollution
§ 94:12	Toxic substances
§ 94:13	Pesticides and herbicides
§ 94:14	Noise
§ 94:15	Land-use and regional planning
§ 94:16	Worker/Employee protection
§ 94:17	Biotechnology
§ 94:18	Medical waste
§ 94:19	Radioactive material
§ 94:20	Marine pollution
§ 94:21	Statutory nuisances
§ 94:22	Contaminated land

### III. IMPLEMENTATION OF ENVIRONMENTAL LAWS

§ 94:23	Responsible authorities on national level
§ 94:24	Responsible authorities on local level
§ 94:25	Degree of delegation to local authorities
§ 94:26	Administrative process/rulemaking
§ 94:27	Enforcement authority

### IV. PRACTICAL CONSIDERATIONS

§ 94:28	Dealing with regulatory authorities
§ 94:29	Dealing with enforcement authorities
§ 94:30	Dealing with citizen groups
§ 94:31	Obtaining permits
§ 94:32	Impact of environmental laws on business transactions— Corporate acquisitions and mergers
§ 94:33	—Real estate purchases
§ 94:34	—Loan and credit transactions
§ 94:35	—Reporting and disclosure requirements
§ 94:36	Regulatory and enforcement litigation
§ 94:37	Toxic tort litigation
§ 94:38	Risk assessment and insurance
§ 94:39	Environmental consultants and attorneys
§ 94:40	Secondary authorities on environmental laws

Appendix 94A. List of Significant Environmental Laws

Appendix 94B. UK Regulatory Enforcement and Sanctions Act  
2008

Appendix 94C. UK Tribunal Procedure (First-Tier Tribunal)  
General Regulatory Chamber Rules 2009

## **CHAPTER 95. ENVIRONMENTAL LAW OF THE UNITED STATES—BY YIYI WONG, ELIZABETH BURLESON AND EDWARD E. SHEA**

### **I. LEGISLATIVE AND REGULATORY UPDATE**

- § 95:1 Future of U.S. International Environmental Regulations and Policies
- § 95:2 Great American Outdoors Act (GAOA): summary of the legislation and its purpose
- § 95:3 Support for the Great American Outdoors Act (GAOA)
- § 95:4 Reduction of international funds to fight climate change
- § 95:5 Change in policy for settlement penalties
- § 95:6 Change in the Endangered Species Act's Compensatory Mitigation Policies
- § 95:7 Withdrawal of Mercury Emissions Regulations from coal power plants
- § 95:8 Withdrawing monitoring water quality for human consumption—Uranium
- § 95:9 Withdrawing monitoring water quality for environmental degradation—Coal
- § 95:10 Withdrawing increased protections for smaller streams, headwaters, and wetlands leading to navigable waterways
- § 95:11 Undoing the ban of toxic substances—Chlorpyrifos (Lorsban)
- § 95:12 Narrowed the scope of safety assessments for potentially toxic chemicals
- § 95:13 Endangered Species Act
- § 95:14 Modification of U.S. Fisheries Protections
- § 95:15 Reduction of protections of ocean fisheries—Atlantic Bluefin Tuna
- § 95:16 Reduction of protections of fisheries—Freshwater
- § 95:17 —Recreational fishing
- § 95:18 Reduced protections for bird species within the Migratory Bird Treaty Act
- § 95:19 Lifting the moratorium on new coal mining leases on public lands
- § 95:20 President Trump's Utilization of The Antiquities Act of 1906
- § 95:21 President Trump's Bears Ears National Monument Policy
- § 95:22 President Trump's Grand Staircase-Escalante National Monument Policy

### **II. US ENVIRONMENTAL LAW, A HISTORY**

- § 95:23 In general

### **III. NATIONAL ENVIRONMENTAL POLICY ACT**

- § 95:24 Introduction

## TABLE OF CONTENTS

- § 95:25 The CEQ's procedures for NEPA compliance
- § 95:26 NEPA in the courts—Applicability of NEPA
- § 95:27 —Standing to challenge agency compliance with NEPA
- § 95:28 —Major federal action
- § 95:29 —Significant effect on the human environment
- § 95:30 —The “hard look” test
- § 95:31 —Scientific methods and data
- § 95:32 —Agency decisions based on final environmental impact statements
- § 95:33 —Supplemental environmental impact statements
- § 95:34 Some NEPA anomalies
- § 95:35 State laws similar to NEPA

## IV. THE CLEAN AIR ACT

- § 95:36 Legislative history
- § 95:37 Ambient air quality—USEPA administration
- § 95:38 —Air quality control regions and pollutant standards
- § 95:39 —State implementation plans
- § 95:40 —Nonattainment areas
- § 95:41 —Attainment areas; prevention of significant deterioration
- § 95:42 —New source review
- § 95:43 New source performance standards
- § 95:44 National emission standards for hazardous air pollutants—Pre-1990 NESHAPs
- § 95:45 —Post-1990 NESHAPs
- § 95:46 —Major sources
- § 95:47 —Area sources
- § 95:48 —Technology-based standards for NESHAPS—MACT standards
- § 95:49 — —GACT standards
- § 95:50 —Health-based standards for NESHAPS
- § 95:51 —Court review of HAP listing
- § 95:52 Accidental releases of chemicals—Requirements of the CAAA of 1990
- § 95:53 —Rulemaking controversies
- § 95:54 —USEPA's chemical accident prevention regulations—Covered processes
- § 95:55 — —Stationary sources
- § 95:56 — —Regulated substances and threshold quantities
- § 95:57 — —Risk management programs
- § 95:58 — —Program documents
- § 95:59 — —Worst case and alternative case analyses
- § 95:60 — —The chemical safety and hazard investigation board
- § 95:61 Motor vehicles and clean fuels
- § 95:62 —Exhaust emissions and oxygenated gasoline
- § 95:63 —Evaporative emissions
- § 95:64 —Fuels and fuel additives
- § 95:65 —Reformulated gasoline

- § 95:66 —“Clean fuel” vehicles
- § 95:67 —Preemption of state laws
- § 95:68 —Fuel economy regulations
- § 95:69 Acid deposition control (acid rain)
- § 95:70 Stratospheric ozone provisions
- § 95:71 Operating permits—The title V programs
- § 95:72 —The USEPA’s permit regulations
- § 95:73 Lakes, bays and coastal waters
- § 95:74 Enforcement

## **V. CLEAN WATER ACT**

- § 95:75 General
- § 95:76 Industrial and commercial effluent discharges
- § 95:77 Prohibition of unpermitted discharges
- § 95:78 Permits under the NPDES program
- § 95:79 Water quality and wastewater management programs
- § 95:80 Technology-based effluent standards
- § 95:81 —Direct dischargers—Existing sources
- § 95:82 — —New and modified sources
- § 95:83 — —POTWs
- § 95:84 —Indirect dischargers
- § 95:85 Toxicity based standards
- § 95:86 Water quality based standards
- § 95:87 Non-point-source effluent
- § 95:88 Stormwater
- § 95:89 Spills and leaks—Notification
- § 95:90 —Spill control and countermeasure plans
- § 95:91 —Facility response plans
- § 95:92 Wetlands
- § 95:93 Sewage sludge
- § 95:94 Enforcement—Federal and state jurisdiction
- § 95:95 —Administrative orders
- § 95:96 —Civil enforcement in a U.S. District Court
- § 95:97 —Criminal enforcement
- § 95:98 —Citizen suits

## **VI. RIVERS, HARBORS AND WETLANDS: THE U.S. ARMY CORPS OF ENGINEERS**

- § 95:99 Dredging and filling restrictions and permits
- § 95:100 The Refuse Act
- § 95:101 Violation of permit restrictions

## **VII. RESOURCE CONSERVATION AND RECOVERY ACT**

- § 95:102 General
- § 95:103 Background
- § 95:104 Definition of solid waste

## TABLE OF CONTENTS

§ 95:105	Definition of hazardous waste
§ 95:106	Universal wastes
§ 95:107	Mixtures; wastes derived from hazardous waste; recyclable wastes
§ 95:108	Generator responsibilities—General duties
§ 95:109	—Small quantity generators
§ 95:110	— —Conditional exempt small quantity generators
§ 95:111	— —Other small quantity generators
§ 95:112	—Acute hazardous waste
§ 95:113	Transporter responsibilities
§ 95:114	Treatment, storage and disposal facilities—TSD permits
§ 95:115	—TSD standards
§ 95:116	Corrective action
§ 95:117	Underground storage tanks
§ 95:118	—Tanks regulated
§ 95:119	—Persons regulated
§ 95:120	—New versus. existing USTs
§ 95:121	—Standards for new USTs
§ 95:122	—Upgrading existing tank systems
§ 95:123	—General operating requirements—Spill and overfill control
§ 95:124	— —Operation and maintenance of corrosion protection
§ 95:125	— —Compatibility, repairs, reporting and recordkeeping
§ 95:126	—Release detection
§ 95:127	—Reporting, investigation and confirmation
§ 95:128	—Release response and corrective action
§ 95:129	—Out-of-service UST systems and closure
§ 95:130	—Financial responsibility
§ 95:131	—State laws
§ 95:132	“Land ban” regulations
§ 95:133	Used oil
§ 95:134	Medical waste
§ 95:135	State hazardous waste regulation
§ 95:136	State nonhazardous solid waste regulation
§ 95:137	Enforcement
§ 95:138	Citizen suits

## **VIII. THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT**

§ 95:139	Background
§ 95:140	“The Superfund” law
§ 95:141	Key definitions—Hazardous substance
§ 95:142	—Release
§ 95:143	—Facility
§ 95:144	—The environment
§ 95:145	Removal actions

## COMPARATIVE ENVIRONMENTAL LAW AND REGULATION

- § 95:146 Investigations and administrative cleanup orders—
  - Investigations and 104(4) letters
- § 95:147 —106 unilateral administrative orders
- § 95:148 The National Contingency Plan
- § 95:149 The hazardous substance response regulations—A very structured system
- § 95:150 —Natural and other releases not subject to response actions
- § 95:151 —Response actions financed by the Superfund
- § 95:152 —Entry and access to the facility
- § 95:153 —Exemption from permit requirements
- § 95:154 —Health assessments
- § 95:155 —Oversight for PRP response actions
- § 95:156 —Discovery and reporting of releases
- § 95:157 —Planned removal actions
- § 95:158 —Preliminary site evaluation
- § 95:159 —Priorities for remedial actions; the hazard ranking system
- § 95:160 —The National Priority List
- § 95:161 —Remedy selection and remedial methods
- § 95:162 —Remedial investigations
- § 95:163 —Feasibility studies
- § 95:164 —Remedy selection methods and criteria
- § 95:165 —Public relations
- § 95:166 —The record of decision
- § 95:167 —Remedial design and remedial action
- § 95:168 —Transfers to offsite locations
- § 95:169 —Review of remedy effectiveness
- § 95:170 Remediation by potentially responsible parties
- § 95:171 Remedy selection criteria (“how clean is clean”)
- § 95:172 Reforms adopted during the 1990s—Directions and guidance documents
- § 95:173 —Risk assessment policies
- § 95:174 —Land use
- § 95:175 —Groundwater criteria
- § 95:176 —Natural attenuation
- § 95:177 —Alternate concentration limits (ACLs)
- § 95:178 —Engineering and institutional controls
- § 95:179 —Progress reported by the General Accounting Office
- § 95:180 Recovery of response costs—Persons entitled to recover response costs
- § 95:181 —Retroactive joint and several liability; causation
- § 95:182 —Costs recoverable
- § 95:183 Citizen suits
- § 95:184 Civil administrative penalties
- § 95:185 Claims against the U.S. government

## **IX. EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT**

- § 95:186 Overview

## TABLE OF CONTENTS

§ 95:187	The USEPA's regulations—Extremely hazardous substances—Emergency planning
§ 95:188	— —Release notification
§ 95:189	— —Civil penalties
§ 95:190	—Hazardous chemical inventories: community right-to-know—Material safety data sheet reporting
§ 95:191	—Hazardous chemical inventories; community right-to-know—Annual inventory reporting
§ 95:192	— —Public requests for information
§ 95:193	— —The Tier One Inventory Form
§ 95:194	— —The Tier Two Form
§ 95:195	—Toxic chemical release reporting: community right-to-know
§ 95:196	— —Toxicity criteria
§ 95:197	— —Covered facilities
§ 95:198	— —Reporting thresholds and threshold exemptions
§ 95:199	— —Supplier notification to customers
§ 95:200	— —Form R
§ 95:201	— —Form A
§ 95:202	— —Recordkeeping
§ 95:203	Citizen suits
§ 95:204	Challenges to listings in the toxic release inventory

## X. THE TOXIC SUBSTANCES CONTROL ACT

§ 95:205	Overview
§ 95:206	Definitions; applicability of TSCA
§ 95:207	The TSCA Chemical Substances Inventory
§ 95:208	Testing of chemicals listed in the TSCA Inventory—Findings required to order testing
§ 95:209	—The Interagency Testing Committee
§ 95:210	—Test guidelines
§ 95:211	—Development of test rules; consent agreements
§ 95:212	—Reimbursement of testing costs
§ 95:213	Premanufacturing notices (PMNs) (TSCA Section 5)—PMN requirements
§ 95:214	—Exclusions and exemptions
§ 95:215	Premanufacturing notices (PMNs) (TSCA Section 5)—The polymer exemption
§ 95:216	—Preparation and submission of a PMN
§ 95:217	Premanufacturing notices (PMNs)—TSCA Section 5—PMN review procedures
§ 95:218	— —PMN substantive review; unilateral and consent orders
§ 95:219	Regulation of microorganisms
§ 95:220	—Reporting requirements and review processes
§ 95:221	Good laboratory practice standards
§ 95:222	—Terminology
§ 95:223	—Statements of compliance; conduct of tests
§ 95:224	—Organization and personnel



## COMPARATIVE ENVIRONMENTAL LAW AND REGULATION

- § 95:225 —Facilities
- § 95:226 —Equipment
- § 95:227 —Testing facilities operation
- § 95:228 —Test, control and reference substance characterization
- § 95:229 —Protocols and conduct of studies
- § 95:230 —Records and reports
- § 95:231 Significant new use notices
- § 95:232 Hazardous chemical substances and mixtures—Authority to impose restrictions including prohibitions
- § 95:233 —Chlorofluorocarbons
- § 95:234 —Halogenated dibenzodioxins and dibenzofurans
- § 95:235 —Polychlorinated biphenyls
- § 95:236 —Hexavalent chromium
- § 95:237 —Nitrosating additives for certain metalworking Fluids
- § 95:238 —Asbestos-containing products
- § 95:239 Imminently hazardous chemical substances and mixtures
- § 95:240 Lead-based paint
- § 95:241 Reporting obligations under Section 8
- § 95:242 —§ 8(a): Preliminary assessment information reports
- § 95:243 —§ 8(b): Inventory update reports
- § 95:244 —§ 8(c): Significant adverse reaction reports
- § 95:245 —§ 8(d): Health and safety data reports
- § 95:246 —§ 8(e): Substantial risk reports
- § 95:247 Export notification and import certification—12(b):  
Export notification
- § 95:248 —Import certification
- § 95:249 Enforcement provisions
- § 95:250 Asbestos abatement in public elementary and secondary schools
- § 95:251 Radon abatement in school and federal buildings
- § 95:252 Lead-based paint abatement in pre-1978 housing

## **XI. THE SAFE DRINKING WATER ACT**

- § 95:253 The Act and its administration
- § 95:254 Public water systems
- § 95:255 Drinking water regulations
- § 95:256 Selection of contaminants under the 1996 amendments
- § 95:257 Court review of MCLs and MCLGs
- § 95:258 Operator certification, treatment techniques and monitoring—Operator certification
- § 95:259 —Treatment techniques
- § 95:260 —Monitoring requirements
- § 95:261 Self-reporting of violations
- § 95:262 Variances, exemptions and monitoring relief
- § 95:263 Source water assessment and protection programs
- § 95:264 Disinfection, filtration and disinfection byproduct rules
- § 95:265 Subsurface water protection
- § 95:266 Bottled water



## TABLE OF CONTENTS

- § 95:267 Lead and copper—Direct requirements and prohibitions relating to lead
- § 95:268 —The lead and copper rule
- § 95:269 State administration
- § 95:270 Application to federal government departments and agencies
- § 95:271 Enforcement and penalties
- § 95:272 Citizen's civil actions

## **XII. FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT**

- § 95:273 Overview and history
- § 95:274 —Accelerated reregistration and deregistration (1988)
- § 95:275 —The Food Quality Protection Act (1996)
- § 95:276 The USEPA's regulations—Pesticide definition and exclusions
- § 95:277 —Active and inert ingredients: biological control agents
- § 95:278 —Exemptions
- § 95:279 —Applications for new registrations and amendments
- § 95:280 —Protection of submitters' rights
- § 95:281 —Review of applications (unconditional and conditional regulation)—Applications
- § 95:282 — —Unconditional registration
- § 95:283 — —Conditional registration
- § 95:284 —Sale and distribution of registered products
- § 95:285 —Classification of pesticides (use restrictions)
- § 95:286 —Registration fees
- § 95:287 —Devices
- § 95:288 —Labels and labeling; worker protection statement
- § 95:289 —Packaging—Child resistant packaging
- § 95:290 — —Proposed container regulations
- § 95:291 —Data requirements for pesticide registration
- § 95:292 —Minor uses
- § 95:293 —Biochemical and microbial pesticides
- § 95:294 —Test protocols
- § 95:295 —Data
- § 95:296 —Product chemistry data requirements
- § 95:297 —Reporting adverse effects
- § 95:298 —Good laboratory practice standards
- § 95:299 —Certificates of usefulness
- § 95:300 —Exemption of federal and state agencies for emergency uses
- § 95:301 —Registration of pesticidal product establishments
- § 95:302 —Advertising policy; export requirements
- § 95:303 —Books and records of pesticide production and distribution
- § 95:304 —Worker protection standard
- § 95:305 —Certification of pesticide applicators

## COMPARATIVE ENVIRONMENTAL LAW AND REGULATION

- § 95:306 —Experimental use permits
- § 95:307 —Plant-incorporated protectants
- § 95:308 —Food additive regulations
- § 95:309 —Tolerances and tolerance exemptions for pesticide residue in or on raw agricultural commodities and processed food
- § 95:310 Reregistration
- § 95:311 Special reviews
- § 95:312 Cancellation
- § 95:313 Suspension
- § 95:314 Inert ingredients
- § 95:315 Antimicrobial products
- § 95:316 Biotechnology products used as plant-incorporated protectants
- § 95:317 Inspections
- § 95:318 Violations and enforcement
- § 95:319 Adulteration and misbranding
- § 95:320 Stop sale, use, or removal orders
- § 95:321 Partial preemption of state regulation

### **XIII. THE OIL POLLUTION ACT AND RELATED LAWS**

- § 95:322 In general
- § 95:323 Liability provisions (Title I)
- § 95:324 Natural resource damages
- § 95:325 Financial responsibility (Title I)
- § 95:326 The Oil Spill Liability Fund (Title I)
- § 95:327 Prevention of oil pollution (Title IV)
- § 95:328 Removal of oil discharges (Title IV)
- § 95:329 Other regulations
- § 95:330 Criminal and civil penalties—Criminal penalties
- § 95:331 —Civil and administrative penalties
- § 95:332 —Small vessels and facilities; small discharges

### **XIV. LAWS PROTECTING WILDLIFE, FISH, PLANTS AND MARINE MAMMALS**

- § 95:333 The Endangered Species Act
- § 95:334 —Listing of endangered and threatened species
- § 95:335 —Critical habitat
- § 95:336 —Limited need to consider scientific data
- § 95:337 —Social and economic impacts
- § 95:338 —Prohibited conduct
- § 95:339 —Experimental populations
- § 95:340 —Permits, exemptions and other exceptions—Permits
- § 95:341 — —Hardship exemptions; exemptions for Alaska Natives
- § 95:342 — —Exemptions granted by the Endangered Species Committee
- § 95:343 —Conservation programs, recovery plans and consultation

## TABLE OF CONTENTS

- § 95:344 —Penalties and enforcement—Civil and criminal penalties
- § 95:345 —Land use control and the ESA
- § 95:346 —Trade in endangered species
- § 95:347 —Citizen suits
- § 95:348 The Marine Mammal Protection Act—Background
- § 95:349 —Definitions
- § 95:350 —Exceptions and exemptions
- § 95:351 —Prohibitions
- § 95:352 —NMFS regulations
- § 95:353 —Permits
- § 95:354 —The Marine Mammal Commission
- § 95:355 —Citizen suits
- § 95:356 —Enforcement
- § 95:357 Other laws
- § 95:358 —The Lacey Act
- § 95:359 —The Bald and Golden Eagle Protection Act
- § 95:360 —The Migratory Bird Treaty Act
- § 95:361 —National Wildlife Refuge System and Restoration Acts

## **CHAPTER 96. ENVIRONMENTAL LAW OF THE UNITED STATES—LAW APPLICABLE IN AMERICAN INDIAN COUNTRY—BY ELIZABETH ANN KRONK WARNER**

- § 96:1 Introduction
- § 96:2 Introduction to tribal sovereignty
- § 96:3 Introduction to the relationship between the American federal government and tribal governments
- § 96:4 Environmental law enacted under inherent tribal sovereignty
- § 96:5 —Introduction
- § 96:6 —An example: tribal climate change related law
- § 96:7 Environmental law enacted by the American federal government and applicable in Indian Country
- § 96:8 —Introduction
- § 96:9 —An example: the Navajo Nation
- § 96:10 — —Navajo Nation Air Pollution Prevention and Control Act

## **CHAPTER 97. ENVIRONMENTAL LAW OF VIETNAM—BY NGUYEN PHUC THUY HIEN**

### **I. INTRODUCTION**

- § 97:1 In general

### **II. SURVEY OF VIETNAM'S LEGAL SYSTEM**

- § 97:2 State's structure and legislation

- § 97:3 Effectiveness and enforcement of legal documents
- § 97:4 Judiciary system

### **III. VIETNAM'S ENVIRONMENTAL LEGISLATION**

- § 97:5 Review of the development of Vietnam environmental legislation
- § 97:6 International and regional cooperation in environmental protection
- § 97:7 Implementation of environmental legislation—The Law on Environmental Protection 1993
- § 97:8 —Other environmental legislation
- § 97:9 —Settlement of environmental violations and disputes—Environmental violations
- § 97:10 — —Environmental disputes
- § 97:11 Climate change and stratospheric ozone depletion

Appendix 97A. Bibliography

### **CHAPTER 98. VOICES OF THE RIVER: THE RISE OF INDIGENOUS WOMEN LEADERS IN THE COLORADO RIVER BASIN—HEATHER TANANA**

- § 98:1 Abstract and Introduction
- § 98:2 A sanctioned patriarchy
- § 98:3 Protecting indigenous ways of life in a changing climate
- § 98:4 Indigenous women rising
- § 98:5 —The face of indigenous leadership
- § 98:6 —Supporting indigenous women now and in the future
- § 98:7 Conclusion