CASES AND MATERIALS ON

ENVIRONMENTAL LAW

Seventh Edition

Daniel A. Farber Jody Freeman Ann E. Carlson Roger W. Findley

American Casebook Series®



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610 Opperman Drive P.O. Box 64526 St. Paul, MN 55164–0526 1–800–328–9352

Printed in the United States of America

ISBN-13: 978-0-314-16290-8 ISBN-10: 0-314-16290-9





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Preface

This edition marks the first time that our esteemed colleague, Roger Findley, has not joined us as a co-author. As one of the founding figures in modern environmental law, Roger took the lead in the initial edition of this casebook twenty-five years ago. As the senior co-author, he has helped inspire and shape every edition since then. It is hard to imagine this casebook without him. This edition is also the first to include Professor Ann Carlson from the UCLA School of Law as a co-author. We miss Roger's contribution greatly and welcome Ann to the book.

The 7th Edition, like its predecessors, is designed to give students an understanding of federal environmental law and policy that is broad and thematic as well as detailed and concrete. We have made some significant changes to this edition and updated it to reflect the fast-changing pace of environmental law. We have also reorganized and reordered much of the material to provide more coherence to the book as a whole.

We have substantially revised our introductory materials. Our opening chapter, Perspectives on Environmental Law, includes foundational views on the field, and the latest scholarly analyses of environmental trends, as well as up-to-the minute details about climate change policies, particularly those emanating from the states. Our second chapter, Approaches to Environmental Protection, covers the most dominant tools for addressing environmental harms, including risk-assessment, cost-benefit analysis and distributional approaches. Thus, when students begin to study the specific regulatory schemes in the balance of the book, they will already have a rich understanding of environmental policy and a grasp of the array of regulatory instruments.

This edition is notable for other changes as well. We have added an entirely new chapter on the Endangered Species Act that includes up-to-date case law, critiques of the Act's focus on individual species rather than ecosystems, and extensive treatment of the Spotted Owl controversy, which serves as an illustrative case study. We have reorganized and integrated the materials on RCRA and CERCLA into an all-new "soup-to-nuts" chapter that provides historical perspective, overviews of each statute, and material describing the relationship between the two statutes. We also now have a stand-alone chapter on toxics regulation under FIFRA and TSCA, as well as new material on the regulatory treatment of genetically modified materials.

In the Clean Air Act chapter, we have entirely revamped the materials on New Source Review to reflect this hot area of litigation. We have expanded our treatment of market mechanisms under the Act to cover more comprehensively the problem of interstate spillovers (including an analysis of the Ozone Transport Commission and the NOX SIP Call). We

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describe a broad range of market mechanisms for addressing air pollution, and extend them to greenhouse gas regulation—for example, we discuss the market approaches contained in the new Regional Greenhouse Gas Initiative just launched by the New England states. We have included new materials and new perspectives on federalism, including a focus on the relationship between state climate change activities and federalism.

Other important additions include new materials on NAFTA and regulatory appropriations cases under Chapter 11 of the treaty; new materials on stormwater pollution and its treatment under the Clean Water Act; and updated and revamped NEPA materials that explain the statute's ongoing significance. As with our last edition, we have added a variety of charts and summaries to help organize and simplify the statutory material

We could not have completed this new edition without the extraordinary efforts of our research assistants, Madeline Fleisher, Adam Kron, Dhananjay Manthripragada, Jessica Yarnall, our indexer, Caleb Donaldson, and our superb administrative assistants Kathy Curley, Mary Elliott, and Lauren Zachry. Peter Wyckoff and Michael Gerrard deserve special thanks for giving us the view from practice, as do our partners and families for providing support and love during the writing process. And our students, who challenge and inspire us to think about environmental issues in new and interesting ways, deserve our appreciation for spurring us to make the casebook better.

As we write this preface, an extraordinary shift is taking place in the U.S. response to perhaps the most significant environmental problem of the coming century, climate change. The federal government has remained largely inactive in efforts to reduce the greenhouse gas emissions that scientists almost uniformly believe are heating the earth's temperatures. Yet into this policy breach have stepped the states, or at least a majority of the states. We see the Northeastern states committing to a market based scheme to reduce carbon dioxide emissions from power plants; California enacting legislation to reduce greenhouse gas emissions from automobile tailpipes (and ten states agreeing to follow California's lead); some twenty states requiring their utilities to purchase renewable energy portfolios; and numerous states and municipalities establishing greenhouse gas emission target reductions. In the aftermath of Hurricane Katrina, Gulf Coast states have expressed their concern about increased vulnerability to flooding. The legal maneuvering surrounding these efforts continues to be dynamic but may not keep pace with climate developments; each new issue of Science and Nature seems to demonstrate that climate change is happening earlier and more rapidly than scientific models have predicted. All of this may prompt a federal statute sooner rather than later; at least two bills on climate change have been introduced in Congress as of the time of writing. The point, however, should be clear: the future of climate change is now, and we are at a delicate, interesting and crucial moment in addressing the problem.

Of monumental importance to the future of U.S. environmental law is the addition of two new justices to the Supreme Court: Chief Justice John Roberts and Associate Justice Samuel Alito. They replace two westerners, Chief Justice Rehnquist and Justice Sandra Day O'Connor. It is hard to predict the impact this shift will have on the field, but it won't be long before we know. The Court decided three important environmental cases in this first Term of the Roberts Court, and has taken at least one for its second Term, all of which implicate the extent of federal power to address environmental problems. As always, the future of environmental law is both interesting and uncertain. It could not be a more exciting time to be a student in the field.

Daniel A. Farber Jody Freeman Ann E. Carlson

July, 2006

Table of Acronyms

AB Appellate Body

ACE Army Corps of Engineers

ADR Alternative Dispute Resolution
AEC Atomic Energy Commission
AEI American Enterprise Institute

AFL-CIO American Federation of Labor and Congress of Industrial

Organizations

AFO Animal Feeding Operation

AID Agency for International Development
AISA American Iron and Steel Institute

ALJ Administrative Law Judge
AMC American Mining Congress
AMI American Meat Institute

ANILCA Alaska National Interest Lands Conservation Act

APA Administrative Procedure Act

APHIS Animal Plant Health and Inspection Service

API American Petroleum Institute
AQCR Air Quality Control Regions

ARARs Applicable or Relevant and Appropriate Requirements

ATA American Trucking Association

AUM Animal Unit Month

BACT Best Available Control Technology

BADCT Best Available Demonstrated Control Technology

BART Best Available Retrofit Technology

BAT Best Achievable Technology

BATEA Best Available Technology Economically Achievable
BCT Best Conventional Pollutant Control Technology

BDAT Best Demonstrated Available Technology

BLM Bureau of Land Management
BMP Best Management Practices
BOD Biochemical Oxygen Demand

BOD5 Biochemical Oxygen Demand measured over a 5-day period

BODS Biochemical Oxygen-Demanding Substances

BPCTCA Best Practicable Control Technology Currently Available

BPJ Best Professional Judgment

BPCT Best Practicable Control Technology

BRD Biological Resources Division

TABI	IC	OF	ACR	ON	PIMIS

BTUs	British Thermal Units

BWCA Boundary Waters Canoe Area

BWCAW Boundary Waters Canoe Area Wilderness

CAA Clean Air Act

CAFE Corporate Average Fuel Economy

CAFO Concentrated Animal Feeding Operation
CARE Citizens Against the Refinery's Effects

CARE Concerned Area Residents for the Environment

CASAC Clean Air Scientific Advisory Committee

CBA Cost-Benefit Analysis

CBD Convention on Biological Diversity
CBI Confidential Business Information
CEQ Council on Environmental Quality

CERCLA Comprehensive Environmental Response, Compensation,

and Liability Act

CFR Code of Federal Regulations

CMA Chemical Manufacturers Association

 ${
m CO}$ Carbon Monoxide ${
m CO}_2$ Carbon Dioxide

COCC Columbia Organic Chemical Company

COD Chemical Oxygen Demand
COLA Cost of Living Adjustment
COP Conference of the Parties

CPSC Consumer Product Safety Commission

CRJ Commission for Racial Justice

CSD Commission on Sustainable Development

CSMA Chemical Specialties Manufacturers Association

CSWG Corporate Sunshine Working Group

CV Contingent Valuation

CWA Clean Water Act

CZMA Coastal Zone Management Act
D2O Deuterium Oxide ("Heavy Water")
DAF Dilution and Attenuation Factor

DBCP Dibromochloropropane
DCO Delayed Compliance Order

DDT DichloroDiphenylTrichloroethane

DEP Department of Environmental Protection

DES Diethylstilbesterol
DF Deterioration Factor

DHEC Department of Health and Environmental Control

DMC De Minimis Classification

DMRs Discharge Monitoring Reports

DNA Deoxyribonucleic Acid

DOI Department of the Interior

DOJ Department of Justice

DOT Department of Transportation

DUs Designated Uses

EA Environmental Assessment

EC European Community

ECJ European Court of Justice

EDF Environmental Defense Fund

EEC European Economic Community

EEI Edison Electric Institute

EGU Electric Generating Unit

EIA Environmental Impact Assessment

EIS Environmental Impact Statement

ELI Environmental Law Institute

EMSs Environmental Management Systems

EP Extraction Procedure

EP Erythrocyte Protoporphyrin

EPA Environmental Protection Agency

EPCRA Emergency Planning and Community Right-to-Know Act

EQB Environmental Quality Board

ESA Endangered Species Act
ETP Eastern Tropical Pacific

ETS Environmental Transportation Systems

EU European Union

EWG The Environmental Working Group
FAA Federal Aviation Administration
FACA Federal Advisory Committee Act

FASB Financial Accounting Standards Board

FBI Federal Bureau of Investigation

FCC Federal Communications Commission

FDA Food and Drug Administration

FDD Final Development Document

FDF Fundamentally Different Factor

FEISS Final Environmental Impact Statement Supplement

FERC Federal Energy Regulatory Commission
FFDCA Federal Food, Drug, and Cosmetic Act

TABLE OF ACRONYMS

FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

FIP Federal Implementation Plan

FLPMA Federal Land Policy and Management Act

FMC Federal Maritime Commission

FOE Friends of the Earth

FOIA Freedom of Information Act
FONSI Finding of No Significant Impact

FPA Federal Power Act

FPAs Final Project Agreements

FWPCA Federal Water Pollution and Control Act

FWS Fish and Wildlife Service

FY Fiscal Year

GAAP Generally Accepted Accounting Principles

GAO General Accounting Office

GAP Gap Analysis Program

GATT General Agreement on Tariffs and Trade

GES Global Environmental Facility

GHG Greenhouse Gas

GIS Geographic Information Systems

GM General Motors

GM Genetically Modified

GMOs Genetically Modified Organisms

GNP Gross National Product

GSA General Services Administration
GWEN Ground Wave Emergency Network

HC Hydrocarbons

HCP Habitat Conservation Plan

HREC Hampton Roads Energy Company

HSWA Hazardous and Solid Waste Amendments

HUDHousing and Urban DevelopmentHWIRHazardous Waste Identification RuleICCInterstate Commerce CommissionICRIgnitable, Corrosive, and Reactive

ICS Individual Control Strategies

IEPA Illinois Environmental Protection Agency

I & M Inspection and Maintenance

INS Immigration and Naturalization Service

IPC International Paper Company

IPCC Intergovernmental Panel on Climate Change

IPM Integrated Pest Management

IPM Integrated Planning Model
ITC Interagency Testing Committee
IWC International Whaling Commission
JCAE Joint Committee on Atomic Energy

JTU Jackson Turbidity Unit

LAER Lowest Achievable Emission Rate
LDRs Land Disposal Restrictions
LEV Low Emissions Vehicle
LIA Lead Industry Association

LMFBR Liquid Metal Fast Breeder Reactor
LULUs Locally Undesirable Land Uses

LWK Live Weight Killed

MACT Maximum Achievable Control Technology

MCC Metropolitan Correction Center

MCL Maximum Contaminant Level

MCLG Maximum Contaminant Level Goal

MGP Manufactured Gas Plant

MMPA Marine Mammal Protection Act
MOA Memorandum of Agreement

MPRSA Marine Protection, Research, and Sanctuaries Act

MSDS Material Safety Data Sheets

MSHA Mine Safety and Health Administration

MSW Municipal Solid Waste

MTBE Methyl Tertiary-Butyl Ether

NAACP National Association for the Advancement of

Colored People

NAAQS National Ambient Air Quality Standards
NAFTA North American Free Trade Agreement

NAS National Academy of Sciences

NASA National Aeronautics and Space Administration

NAZ Nonattainment Zone

NBARs Nonbinding Preliminary Allocations of Responsibility

NBII National Biological Information Infrastructure

NBS National Biological Service

NCCP Natural Community Conservation Program

NCP National Contingency Plan

NEPA National Environmental Policy Act

NEPACCO Northeastern Pharmaceutical and Chemical Company
NESHAP National Emission Standards for Hazardous Air Pollutants

NFMA National Forest Management Act
NGO Nongovernmental Organization

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NGPRP Northern Great Plains Resources Program

NIEHS National Institute of Environmental Health Sciences

NIMBY "Not In My Back Yard"

NIPDWS National Interim Primary Drinking Water Standards

NLEV National Low Emission Vehicle

NO₂ Nitrogen Dioxide

NOAA National Oceanographic and Atmospheric Agency

NODA Notice of Data Availability

NO_x Nitrogen Oxides

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

NRA Negotiated Rulemaking Act

NRC Nuclear Regulatory Commission

NRC National Research Council

NRDC Natural Resources Defense Council
NSPS New Source Performance Standards

NSR New Source Review

NWF National Wildlife Federation

O₃ Ozone

OCPSF Organic Chemicals, Plastics and Synthetic Fibers

OCS Outer Continental Shelf

OCSLA Outer Continental Shelf Lands Act
OMB Office of Management and Budget

OSHA Occupational Safety and Health Administration
OSWER Office of Solid Waste and Emergency Response

OTAG Ozone Transport Assessment Group
PANE People Against Nuclear Energy

Ph Lead

PBT Persistent, Bioaccumulative, and Toxic

PCB Polychlorinated Biphenyl
PEL Permissible Exposure Limit
PG&E Pacific Gas and Electric

PIRG Public Interest Research Group

PM Particulate Matter

POTWs Publicly Owned Treatment Works

PPA Plant Pest Act
ppm parts per million
ppq parts per quadrillion
ppt parts per trillion

PRP Potentially Responsible Party

PSD Prevention of Significant Deterioration

PSNS Pretreatment Standards for New Sources

PUD Public Utility District

RACM Reasonably Available Control Measures
RACT Reasonably Available Control Technology
RAND Research and Development (a think tank)

RCO Responsible Corporate Officer

RCRA Resource Conservation and Recovery Act
RECLAIM Regional Clean Air Incentives Market

RFF Resources for the Future

RPA Renewable Resources Planning Act

RTCs RECLAIM Trading Credits
SAB Staff Accounting Bulletins
SAB Scientific Advisory Board
SAP Scientific Advisory Panel

SARA Superfund Amendment and Reauthorization Act
SCRDI South Carolina Recycling and Disposal, Inc.

SCS Soil Conservation Service
SDWA Safe Drinking Water Act

SEC Securities and Exchange Commission

SEIS Supplemental Environmental Impact Statement

SEPs Supplemental Environmental Projects
SEPs Supplemental Enforcement Plans
SIC Standard Industrial Classification

SICEA Steel Industry Compliance Extension Act

SIP State Implementation Plan

SIPI Scientists' Institute for Public Information

SIR Supplemental Information Report

SO₂ Sulfur Dioxide

SPS Sanitary and Phyto-Sanitary

SRF State Revolving Fund

SWANCC Solid Waste Agency of Northern Cook County

TC Toxicity Characteristic

TCDD 2,3,7,8-Tetrachlorodibenzo-p-dioxin

TCLP Toxicity Characteristic Leaching Procedure

TCP 2,4,5-Trichlorophenol

TCP Transportation Control Plan
TMDLs Total Maximum Daily Loads

TMI-1 Three Mile Island Unit 1 nuclear power plant
TMI-2 Three Mile Island Unit 2 nuclear power plant

TOC Total Organic Carbon
TRI Toxic Release Inventory

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AVI	ALLES MALL VA	THULLOTTILLIAN

TRPA Tahoe Regional Planning Agency
TSCA Toxic Substances Control Act

TSD Treatment, Storage, and Disposal

TSDFs Treatment, Storage, and Disposal Facilities

TSS Total Suspended Solids
TTHMs Total Trihalomethanes
TVA Tennessee Valley Authority

μg/m3 Micrograms per cubic meter (of air)

 μ g Pb/dl Micrograms of lead per deciliter (of blood) μ g Pb/m3 Micrograms of lead per cubic meter (of air)

U.N. United Nations

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate

Change

USDA United States Department of Agriculture

USEPA United States Environmental Protection Agency

USGS United States Geological Survey
UST Underground Storage Tank
VCP Voluntary Cleanup Program
VOCs Volatile Organic Compounds

WARC Water and Air Resources Commission

WLAS Wasteload Allocations
WQC Water Quality Criteria
WQSS Water Quality Standards
WQTP Water Quality Trading Policy
WTO World Trade Organization
WWTP Wastewater Treatment Plant
ZEV Zero Emission Vehicle

Table of Cases

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