

Corporate Environmental Management

Second Edition

John Darabaris



CRC Press

Taylor & Francis Group

Boca Raton London New York

CRC Press is an imprint of the
Taylor & Francis Group, an **informa** business

Contents

List of Figures and Tableix
Preface..... xiii
Author xv

Chapter 1 Introduction 1

Chapter 2 Environmental Management Assessment 9

Chapter 3 Lines of Inquiry..... 13

Chapter 4 Assessment Model and Analytical Framework..... 17
 Assessment Model..... 17
 Analytical Framework..... 19
 Program versus Project Management..... 19
 Environmental Risk Management..... 21

Chapter 5 Internal Survey 27
 Corporate Headquarters 27
 Operations 28
 Step 1: Identify the Threats and Hazards of Concern 29
 Step 2: Give the Threats and Hazards Context 30
 Step 3: Establish Capability Targets..... 30
 Step 4: Apply the Results..... 30

Chapter 6 Corporate Commitment 33
 Senior Management Commitment 33
 Corporate Environmental Policy..... 35
 Responsible Care 36
 The CERES Principles 36
 GEMI and the ICC Charter 37
 United Nations Environment Programme’s Financial
 Institutions Initiative on the Environment..... 37
 Environmental Banking Association 38
 World Business Council for Sustainable Development 38
 ISO 14000..... 38
 Performance Track Corporate Leaders 41
 Strategic Environmental Planning 41

| | | |
|-------------------|--|-----|
| Chapter 7 | Communication | 45 |
| | External Communication/Public Relations..... | 45 |
| | Internal Communication | 47 |
| | Issue Management..... | 48 |
| Chapter 8 | Functional Implementation | 53 |
| | Organization and Staffing | 53 |
| | Internal Integration..... | 54 |
| | Operational Systems..... | 55 |
| | Pollution Prevention Opportunities | 57 |
| | Environmental Risk Management..... | 61 |
| | Waste Minimization Programs | 62 |
| | The Emission Reduction Program | 63 |
| Chapter 9 | Measurement Systems..... | 67 |
| | Audit Program..... | 67 |
| | Site Tours | 70 |
| | Root Cause Analysis..... | 71 |
| | Environmental Management Information System | 72 |
| | Environmental Cost Management..... | 73 |
| | Environmental Asset Management | 76 |
| | Environmental Financial Management..... | 79 |
| | Conventional Commercial Loan..... | 80 |
| | Supplier Financing..... | 80 |
| | Commercial Paper | 80 |
| | Bond Financing | 81 |
| | Private Placement Debt | 81 |
| | Environmental Capital Equipment Leasing | 81 |
| | Environmentally Related Preferred Stock..... | 82 |
| | Master Limited Partnerships | 82 |
| | Research and Development | 82 |
| | National Preparedness Goal | 86 |
| Chapter 10 | Benchmark Survey | 87 |
| | Environmental Management-Based Benchmarking Survey | |
| | Approach | 89 |
| | Technical-Based Benchmarking Survey Approach | 90 |
| Chapter 11 | External Survey | 99 |
| | External Scan | 99 |
| | Assessing Global Impacts: Sustainable Development..... | 99 |
| | Project Life Cycle Analysis..... | 103 |

| | |
|--|-----|
| Activist Group Alliances..... | 104 |
| Independent Technology Scan..... | 106 |
| Chapter 12 Natural Resource Damage Assessment: Proactive Strategies..... | 107 |
| Early Recognition of Contamination Stage..... | 112 |
| Agreement or Settlement Stage..... | 112 |
| Cleanup Stage..... | 112 |
| Pursuit of a PRP Claim Stage | 112 |
| Chapter 13 Environmental Risk Assessment Issues | 115 |
| General Discussion..... | 115 |
| Health Assessments | 115 |
| Ecological Risk Assessment..... | 117 |
| Population Risk Analysis | 120 |
| Chapter 14 Emergency Response Analysis..... | 123 |
| Contingency Plans..... | 124 |
| Up-the-Stack Emergencies | 124 |
| Threat and Hazard Identification and Risk Assessment and Stakeholder Preparedness Review Guide..... | 127 |
| General Emergency Management Concepts | 128 |
| Small Projects..... | 133 |
| Requirements for Small Projects | 133 |
| Small Project Appeals | 134 |
| Large Projects..... | 135 |
| Chapter 15 Corporate Health and Safety System | 137 |
| Establishing Hazard and Safety Control Measures..... | 138 |
| Inorganic Chemicals..... | 139 |
| Organic Compounds..... | 139 |
| Operational Chemicals/Hazard Communication Program | 140 |
| Personal Protective Equipment..... | 141 |
| Respiratory Protection | 141 |
| Levels of Protection..... | 141 |
| Monitoring and Medical Surveillance..... | 144 |
| Site Control of Work Zones..... | 145 |
| Exclusion Zone (EZ)..... | 146 |
| Chapter 16 Environmental Risk Management at Banking Institutions..... | 147 |
| Practices for the Commercial Banking Community..... | 149 |
| EPA Lender Liability Rule | 151 |
| Post-Commitment Practices for Debt Transactions | 151 |

| | |
|--|-----|
| Practices for the Equity Banking Community | 153 |
| Integrating Environmental and Financial Performance..... | 156 |
| Chapter 17 Global Warming | 163 |
| Existing Market and Potential Revenue | 164 |
| Brokers | 164 |
| Global Climate Profile..... | 165 |
| Global Climate Summary | 167 |
| Chapter 18 Assessment of International Trends | 171 |
| OECD/EIRIS Study Results..... | 171 |
| Survey on the State of Global Environmental and Social Reporting..... | 181 |
| Emerging China and India Environmental Issues | 181 |
| Kyoto Protocol Debates..... | 183 |
| State of the US Environmental Policies | 184 |
| “Greenwash” versus “Green Machine” Debate..... | 184 |
| ExxonMobil..... | 185 |
| Wal-Mart | 185 |
| Paris Climate Agreement | 186 |
| Trans-Pacific Partnership | 190 |
| North American Free Trade Agreement | 192 |
| Chapter 19 Summary | 197 |
| Bibliography | 201 |
| Index | 207 |