# ENVIRONMENTAL LAW IN SWITZERLAND

THIRD EDITION

ANNE PETITPIERRE



Stämpfli Publishers



(I) Wolters Kluwer



Published by:

Kluwer Law International

PO Box 316

2400 AH Alphen aan den Rijn

The Netherlands

Website: www.wklawbusiness.com

Sold and distributed in North, Central and South America by:

Aspen Publishers, Inc. 7201 McKinney Circle

Frederick, MD 21704

United States of America

Email: customer.service@aspenpublishers.com

Sold and Distributed in Switzerland by:

Stämpfli Publishers Ltd.

Wölflistr. 1, P.O. Box 5662

CH-3001 Berne

Switzerland

E-mail: verlag@staempfli.com

Phone: +41 31 300 66 44

Website: www.staempfliverlag.com

Sold and distributed in all other countries by:

Turpin Distribution Services Ltd.

Stratton Business Park

Pegasus Drive, Biggleswade

Bedfordshire SG18 8TQ

United Kingdom

Email: kluwerlaw@turpin-distribution.com

DISCLAIMER: The material in this volume is in the nature of general comment only. It is not offered as advice on any particular matter and should not be taken as such. The editor and the contributing authors expressly disclaim all liability to any person with regard to anything done or omitted to be done, and with respect to the consequences of anything done or omitted to be done wholly or partly in reliance upon the whole or any part of the contents of this volume. No reader should act or refrain from acting on the basis of any matter contained in this volume without first obtaining professional advice regarding the particular facts and circumstances at issue. Any and all opinions expressed herein are those of the particular author and are not necessarily those of the editor or publisher of this volume.

Printed on acid-free paper

ISBN 978-90-411-6163-5 (Kluwer) ISBN 978-3-7272-7759-7 (Stämpfli)

This title is available on www.kluwerlawonline.com

© 2015, Kluwer Law International BV, The Netherlands

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher.

Permission to use this content must be obtained from the copyright owner. Please apply to: Permissions Department, Wolters Kluwer Legal, 76 Ninth Avenue, 7th Floor, New York, NY 10011-5201, USA. Email: permissions@kluwerlaw.com

Printed and Bound by CPI Group (UK) Ltd, Croydon, CR0 4YY.

# **Environmental Law in Switzerland**

| The Author  | 3        |
|---|----------|
| List of Abbreviations   | 11       |
| General Introduction  | 15       |
| §1. GENERAL INFORMATION                                       | 15<br>15 |
| I. Geography and Population                                   |          |
| II. Legal and Political Structures                            | 17       |
| III. Economic Characteristics                                 | 19       |
| A. General  | 19       |
| B. Environmental Economic Instruments                         | 20       |
| IV. Social and Cultural Characteristics                       | 23       |
| V. Main Environmental Problems                                | 24       |
| A. Demography and Economic Development                        | 25       |
| B. Global Problems  | 26       |
| C. Energy Consumption   | 28       |
| D. Traffic  | 30       |
| E. Agriculture  | 31       |
| F. Waste  | 33       |
| G. Soil and Contaminated Sites                                | 35       |
| H. Water  | 36       |
| I. Nature, Landscape, Forests                                 | 38       |
| J. Management of Risks  | 40       |
| K. General Outlook  | 41       |
| §2. BASIC PRINCIPLES OF ENVIRONMENTAL LAW                     | 42       |
| §3. HISTORICAL BACKGROUND OF ENVIRONMENTAL LAW                | 48       |
| §4. Role of Government Institutions in the Shaping and        |          |
| ADMINISTRATION OF ENVIRONMENTAL LAW AND POLICY                | 51       |
| I. The Federal Governmental Institutions and Their Competence | 51       |
| II. The Cantons and Their Institutions                        | 53       |
| III The Actual Implementation of Environmental Law            | 55       |

| §5. Sources of Environmental Law   | 57                   |
|--|----------------------|
| Part I. Pollution Control  | 61                   |
| Chapter 1. General Law   | 61                   |
| §1. General Provisions   | 61                   |
| §2. Enforcement and Sanctions  | 68                   |
| Chapter 2. Air Pollution   | 71                   |
| §1. General Provisions   | 71                   |
| §2. Industrial Pollution   | 73                   |
| §3. GLOBAL CLIMATIC CHANGE AND OTHER INTERNATIONAL COMMITMENTS  I. Climate Change II. Transboundary Air Pollution III. Protection of the Ozone Layer | 74<br>74<br>78<br>79 |
| §4. ACID RAIN AND DAMAGES TO FORESTS   | 79                   |
| §5. Traffic Pollution  | 81                   |
| §6. Enforcement and Control  | 83                   |
| §7. EVALUATION OF THE EFFICIENCY OF THE LEGAL PROVISIONS   | 83                   |
| Chapter 3. Water Quality   | 86                   |
| §1. Introduction   | 86                   |
| §2. WATER MANAGEMENT  I. Surface Water Management  II. Water Supply  III. Waste Water  | 89<br>89<br>91<br>95 |
| §3. Enforcement and Control  | 96                   |
| §4. SPECIAL ENFORCEMENT RULES  | 98                   |
| §5. EVALUATION OF THE EFFICIENCY OF THE LEGAL PROVISIONS   | 99                   |
| Chapter 4. Waste   | 102                  |
|  |                      |

6

| §1. INTRODUCTION   | 102                             |
|--|---------------------------------|
| §2. PREVENTION, RECYCLING AND WASTE DISPOSAL  I. Definition and Disposal Principles  II. Licensing and Planning  III. Economic Instruments     | 103<br>103<br>105<br>107        |
| §3. HOUSEHOLDS AND HAZARDOUS WASTE   | 108                             |
| §4. LANDFILLS AND CONTAMINATED SOIL  | 111                             |
| §5. IMPLEMENTATION AND CONTROL   | 113                             |
| §6. EVALUATION OF THE EFFICIENCY OF THE LEGAL PROVISIONS   | 115                             |
| Chapter 5. Soil Pollution  | 118                             |
| §1. LEGISLATION  | 118                             |
| §2. IMPLEMENTATION AND EVALUATION OF THE LEGISLATION   | 119                             |
| Chapter 6. Noise and Vibrations  | 122                             |
| §1. LEGISLATION  | 122                             |
| §2. Noise from Fixed Facilities  | 124                             |
| §3. Traffic Noise  | 125                             |
| §4. IMPLEMENTATION AND EVALUATION OF THE EFFICIENCY OF THE PROVISIONS  | 126                             |
| Chapter 7. Radiation   | 129                             |
| §1. GENERAL LEGISLATION  | 129                             |
| §2. IMPLEMENTATION AND EVALUATION OF THE EFFICIENCY  | 131                             |
| Chapter 8. Noxious Substances and Organisms  | 134                             |
| §1. NOXIOUS SUBSTANCES  I. General Rules  II. Notification, Communication and Licenses  III. Restricted Use  IV. Implementation and Evaluation | 134<br>135<br>137<br>138<br>139 |

| §2. Organisms  | 140 |
|--|-----|
| I. General Rules   | 140 |
| II. Restricted Use                                       | 142 |
| A. Restricted Use of Pathogenic Organisms                | 142 |
| B. Restricted Use of GMO                                 | 143 |
| III. Implementation                                      | 146 |
| Chapter 9. Rational Use of Energy                        | 149 |
| §1. THE FEATURES OF ENERGY CONSUMPTION                   | 149 |
| §2. Energy Policy  | 149 |
| Part II. Nature Conservation and Management              | 155 |
| Chapter 1. Monuments and Landscapes                      | 155 |
| §1. General Rules  | 155 |
| §2. The Surveys ('Inventories')                          | 157 |
| §3. Plants, Animals and Biotopes                         | 158 |
| §4. Contractual Instruments                              | 159 |
| §5. IMPLEMENTATION AND ENFORCEMENT                       | 160 |
| Chapter 2. Parks and Reserves                            | 162 |
| §1. DESIGNATION  | 162 |
| §2. Scope of the Protection                              | 164 |
| Chapter 3. Wildlife Protection                           | 166 |
| §1. LEGISLATION  | 166 |
| §2. IMPLEMENTATION AND ENFORCEMENT                       | 167 |
| Chapter 4. Agricultural Resources                        | 170 |
| §1. THE ROLE OF AGRICULTURE AND ITS ENVIRONMENTAL IMPACT | 170 |
| §2. LEGISLATION ON ENVIRONMENT AND AGRICULTURE           | 172 |

|   | <b>Table of Contents</b> |
|---|--------------------------|
| §3. ECOLOGICAL SUBSIDIES                              | 173                      |
| §4. IMPLEMENTATION                                    | 175                      |
| Chapter 5. Forests                                    | 177                      |
| §1. HISTORICAL BACKGROUND                             | 177                      |
| §2. THE CONCEPT OF 'FOREST' AND ITS GENERAL PROTECTIO | N 178                    |
| §3. IMPLEMENTATION: THE PERMITS AND LICENSES          | 180                      |
| Chapter 6. Fish Resources                             | 183                      |
| Chapter 7. Subsoil and Minerals                       | 185                      |
| Part III. Zoning and Land-Use Planning                | 187                      |
| Chapter 1. Planning                                   | 187                      |

§1. Introduction

§3. COMPENSATION

§1. GENERAL RULES

§4. SPECIAL PERMITS

§1. GENERAL RULES

§2. EXEMPTIONS

§2. GENERAL PLANNING

§4. DETAILED PLANNING

Chapter 2. Building Permits

Part IV. Liability Questions

Chapter 1. Rules on Liability

§2. LIABILITY OF THE OWNER OF LAND

§3. IMPLEMENTATION AND CITIZENS' RIGHTS

187

188

189

190

193

193

195

196

198

201

201

201

203

| §3. SPECIAL LIABILITIES                     | 204 |
|---|-----|
| I. General Rule                             | 204 |
| II. Specific Liabilities                    | 205 |
| A. Pathogenic and GMO                       | 205 |
| B. The Law on Liability for Nuclear Hazards | 207 |
| C. The Law on Liability for Pipelines       | 208 |
| D. Products Liability                       | 209 |
| E. Water Retaining Facilities               | 209 |
| Chapter 2. Public Liability and Prevention  | 211 |
| §1. LIABILITY UNDER ADMINISTRATIVE LAW      | 211 |
| §2. Prevention of Disasters                 | 212 |
| Part V. Individual Legal Actions            | 215 |
| Chapter 1. Administrative Remedies          | 215 |
| §1. THE ADMINISTRATIVE SYSTEM               | 215 |
| §2. RIGHT OF ACCESS TO INFORMATION          | 216 |
| §3. GENERAL RIGHT TO COMPLAIN OR APPEAL     | 217 |
| §4. SPECIAL RIGHTS TO APPEAL                | 218 |
| I. Rights of Public Bodies                  | 218 |
| II. Rights of Organizations                 | 219 |
| Chapter 2. Civil and Criminal Procedures    | 221 |
| §1. CIVIL PROCEDURE                         | 221 |
| §2. Criminal Procedure                      | 221 |
| Selected Bibliography                       | 223 |
| Index                                       | 229 |

# **Environmental Law in Switzerland**

#### Third Edition

# **Anne Petitpierre**

This book was originally published as a monograph in the International Encyclopaedia of Laws/Environmental Law

General Editors: Roger Blanpain, Frank Hendrickx Volume Editor: Kurt Deketelaere



Stämpfli Publishers



Published by:

Kluwer Law International

PO Box 316

2400 AH Alphen aan den Rijn

The Netherlands

Website: www.wklawbusiness.com

Sold and distributed in North, Central and South America by:

Aspen Publishers, Inc.

7201 McKinney Circle

Frederick, MD 21704

United States of America

Email: customer.service@aspenpublishers.com

Sold and Distributed in Switzerland by:

Stämpfli Publishers Ltd.

Wölflistr. 1, P.O. Box 5662

CH-3001 Berne

Switzerland

E-mail: verlag@staempfli.com

Phone: +41 31 300 66 44

Website: www.staempfliverlag.com

Sold and distributed in all other countries by:

Turpin Distribution Services Ltd.

Stratton Business Park

Pegasus Drive, Biggleswade

Bedfordshire SG18 8TQ

United Kingdom

Email: kluwerlaw@turpin-distribution.com

DISCLAIMER: The material in this volume is in the nature of general comment only. It is not offered as advice on any particular matter and should not be taken as such. The editor and the contributing authors expressly disclaim all liability to any person with regard to anything done or omitted to be done, and with respect to the consequences of anything done or omitted to be done wholly or partly in reliance upon the whole or any part of the contents of this volume. No reader should act or refrain from acting on the basis of any matter contained in this volume without first obtaining professional advice regarding the particular facts and circumstances at issue. Any and all opinions expressed herein are those of the particular author and are not necessarily those of the editor or publisher of this volume.

Printed on acid-free paper

ISBN 978-90-411-6163-5 (Kluwer) ISBN 978-3-7272-7759-7 (Stämpfli)

This title is available on www.kluwerlawonline.com

© 2015, Kluwer Law International BV, The Netherlands

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher.

Permission to use this content must be obtained from the copyright owner. Please apply to: Permissions Department, Wolters Kluwer Legal, 76 Ninth Avenue, 7th Floor, New York, NY 10011-5201, USA. Email: permissions@kluwerlaw.com

Printed and Bound by CPI Group (UK) Ltd, Croydon, CR0 4YY.

# The Author



Prof. Anne Petitpierre is Honorary Professor of Law at Geneva University and admitted to the Geneva Bar. She has been teaching Trade and Sustainable Development at the Università della Svizzera Italiana, Faculty of Economy, in Lugano, from 2004 till 2014. She is the author of numerous articles on Environmental Law and on the Law of Energy, as well as of a report to the Swiss Law Society on the 'polluter-pays' principle. Before her appointment as Professor, she was Member of the Cantons' Parliament in Geneva (1977–1985) and President of the Swiss foundation 'WWF Switzerland' (Worldwide Fund for Nature). She also was a member of the Federal Commission on Energy, an

advisory board of the Swiss Government, and chaired the Council on Sustainable Development, an advisory commission of the Swiss Federal Council (1998–2000).

The Author

| The Author  | 3        |
|---|----------|
| List of Abbreviations   | 11       |
| General Introduction  | 15       |
| §1. GENERAL INFORMATION                                       | 15<br>15 |
| I. Geography and Population                                   |          |
| II. Legal and Political Structures                            | 17       |
| III. Economic Characteristics                                 | 19       |
| A. General  | 19       |
| B. Environmental Economic Instruments                         | 20       |
| IV. Social and Cultural Characteristics                       | 23       |
| V. Main Environmental Problems                                | 24       |
| A. Demography and Economic Development                        | 25       |
| B. Global Problems  | 26       |
| C. Energy Consumption   | 28       |
| D. Traffic  | 30       |
| E. Agriculture  | 31       |
| F. Waste  | 33       |
| G. Soil and Contaminated Sites                                | 35       |
| H. Water  | 36       |
| I. Nature, Landscape, Forests                                 | 38       |
| J. Management of Risks  | 40       |
| K. General Outlook  | 41       |
| §2. BASIC PRINCIPLES OF ENVIRONMENTAL LAW                     | 42       |
| §3. HISTORICAL BACKGROUND OF ENVIRONMENTAL LAW                | 48       |
| §4. Role of Government Institutions in the Shaping and        |          |
| ADMINISTRATION OF ENVIRONMENTAL LAW AND POLICY                | 51       |
| I. The Federal Governmental Institutions and Their Competence | 51       |
| II. The Cantons and Their Institutions                        | 53       |
| III The Actual Implementation of Environmental Law            | 55       |

| §5. Sources of Environmental Law   | 57                   |
|--|----------------------|
| Part I. Pollution Control  | 61                   |
| Chapter 1. General Law   | 61                   |
| §1. General Provisions   | 61                   |
| §2. Enforcement and Sanctions  | 68                   |
| Chapter 2. Air Pollution   | 71                   |
| §1. General Provisions   | 71                   |
| §2. Industrial Pollution   | 73                   |
| §3. GLOBAL CLIMATIC CHANGE AND OTHER INTERNATIONAL COMMITMENTS  I. Climate Change II. Transboundary Air Pollution III. Protection of the Ozone Layer | 74<br>74<br>78<br>79 |
| §4. ACID RAIN AND DAMAGES TO FORESTS   | 79                   |
| §5. Traffic Pollution  | 81                   |
| §6. Enforcement and Control  | 83                   |
| §7. EVALUATION OF THE EFFICIENCY OF THE LEGAL PROVISIONS   | 83                   |
| Chapter 3. Water Quality   | 86                   |
| §1. Introduction   | 86                   |
| §2. WATER MANAGEMENT  I. Surface Water Management  II. Water Supply  III. Waste Water  | 89<br>89<br>91<br>95 |
| §3. Enforcement and Control  | 96                   |
| §4. SPECIAL ENFORCEMENT RULES  | 98                   |
| §5. EVALUATION OF THE EFFICIENCY OF THE LEGAL PROVISIONS   | 99                   |
| Chapter 4. Waste   | 102                  |

| §1. INTRODUCTION   | 102                             |
|--|---------------------------------|
| §2. PREVENTION, RECYCLING AND WASTE DISPOSAL  I. Definition and Disposal Principles  II. Licensing and Planning  III. Economic Instruments     | 103<br>103<br>105<br>107        |
| §3. HOUSEHOLDS AND HAZARDOUS WASTE   | 108                             |
| §4. Landfills and Contaminated Soil  | 111                             |
| §5. IMPLEMENTATION AND CONTROL   | 113                             |
| §6. Evaluation of the Efficiency of the Legal Provisions   | 115                             |
| Chapter 5. Soil Pollution  | 118                             |
| §1. Legislation  | 118                             |
| §2. IMPLEMENTATION AND EVALUATION OF THE LEGISLATION   | 119                             |
| Chapter 6. Noise and Vibrations  | 122                             |
| §1. Legislation  | 122                             |
| §2. Noise from Fixed Facilities  | 124                             |
| §3. Traffic Noise  | 125                             |
| §4. IMPLEMENTATION AND EVALUATION OF THE EFFICIENCY OF THE PROVISIONS  | 126                             |
| Chapter 7. Radiation   | 129                             |
| §1. GENERAL LEGISLATION  | 129                             |
| §2. IMPLEMENTATION AND EVALUATION OF THE EFFICIENCY  | 131                             |
| Chapter 8. Noxious Substances and Organisms  | 134                             |
| §1. NOXIOUS SUBSTANCES  I. General Rules  II. Notification, Communication and Licenses  III. Restricted Use  IV. Implementation and Evaluation | 134<br>135<br>137<br>138<br>139 |

| §2. Organisms  | 140 |
|--|-----|
| I. General Rules   | 140 |
| II. Restricted Use                                       | 142 |
| A. Restricted Use of Pathogenic Organisms                | 142 |
| B. Restricted Use of GMO                                 | 143 |
| III. Implementation                                      | 146 |
| Chapter 9. Rational Use of Energy                        | 149 |
| §1. THE FEATURES OF ENERGY CONSUMPTION                   | 149 |
| §2. Energy Policy  | 149 |
| Part II. Nature Conservation and Management              | 155 |
| Chapter 1. Monuments and Landscapes                      | 155 |
| §1. General Rules  | 155 |
| §2. The Surveys ('Inventories')                          | 157 |
| §3. Plants, Animals and Biotopes                         | 158 |
| §4. Contractual Instruments                              | 159 |
| §5. IMPLEMENTATION AND ENFORCEMENT                       | 160 |
| Chapter 2. Parks and Reserves                            | 162 |
| §1. DESIGNATION  | 162 |
| §2. Scope of the Protection                              | 164 |
| Chapter 3. Wildlife Protection                           | 166 |
| §1. LEGISLATION  | 166 |
| §2. IMPLEMENTATION AND ENFORCEMENT                       | 167 |
| Chapter 4. Agricultural Resources                        | 170 |
| §1. THE ROLE OF AGRICULTURE AND ITS ENVIRONMENTAL IMPACT | 170 |
| §2. LEGISLATION ON ENVIRONMENT AND AGRICULTURE           | 172 |