

ENVIRONMENTAL CRIME

ABOUT THE AUTHOR

Steven C. Drielak received his bachelor's and master's degrees from John Jay College of Criminal Justice, in New York City. As a Senior Investigator with the New York County District Attorney's Office from 1975 to 1978, he investigated cases involving corruption and racketeering. In 1978, he joined the staff of the Suffolk County District Attorney's Office. He was assigned to the newly-created Environmental Crime Unit in May of 1984, and he has commanded the unit since 1992. During his tenure in the Environmental Crime Unit, he has received two Distinguished Service Awards. Detective Lieutenant Drielak is also a certified instructor for the Criminal Investigations Division of the U.S. Environmental Protection Agency's National Academy and teaches in the Advanced Environmental Crimes Training Program.

ENVIRONMENTAL CRIME

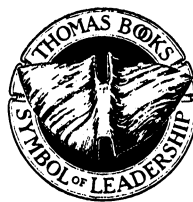
Evidence Gathering and Investigative Techniques

By

STEVEN C. DRIELAK

With a Foreword by

ROBERT F. KENNEDY, JR.



CHARLES C THOMAS • PUBLISHER, LTD.
Springfield • Illinois • U.S.A.

Published and Distributed Throughout the World by
CHARLES C THOMAS • PUBLISHER, LTD.
2600 South First Street
Springfield, Illinois 62794-9265

This book is protected by copyright. No part of
it may be reproduced in any manner without
written permission from the publisher.

© 1998 by CHARLES C THOMAS • PUBLISHER, LTD.
ISBN 0-398-06888-7 (cloth)
ISBN 0-398-06889-5 (paper)

Library of Congress Catalog Card Number: 98-7742

*With THOMAS BOOKS careful attention is given to all details of manufacturing
and design. It is the Publisher's desire to present books that are satisfactory as to their
physical qualities and artistic possibilities and appropriate for their particular use.
THOMAS BOOKS will be true to those laws of quality that assure a good name
and good will.*

Printed in the United States of America
CR-R-3

Library of Congress Cataloging in Publication Data

Drielak, Steven C.

Environmental crime : evidence gathering and investigative
techniques / by Steven C. Drielak ; with a foreword by Robert
F. Kennedy, Jr.

p. cm.

Includes bibliographical references and index.

ISBN 0-398-06888-7 (cloth). -- ISBN 0-398-06889-5 (paper)

1. Offenses against the environment--United States. 2. Criminal
investigation--United States. I. Title.

HV6403.D75 1998

363.25'942--dc21

98-7742

CIP

To Jo and Kimi

FOREWORD

Not long ago, I sat in my office with Captain Ron Gatto, a New York City Police Officer attached to the City's Department of Environmental Protection (DEP) and charged with protecting the City's upstate reservoir system from pollution. DEP has no authority to prosecute upstate polluters for environmental violations, so when Gatto catches a polluter or developer violating environmental laws, he must persuade a local prosecutor to take the case. A few weeks before our meeting, a worried fly fisherman had alerted Gatto to a noxious plume of milky fluid emitting from a hidden pipe buried in the bank of the Croton River, a feeder tributary to New York's reservoirs. Gatto had traced the pipe to its source, the floor drain in a shop of a Brewster, New York Auto Dealer that regularly ridded itself of dangerous chemicals by discharging them into the drinking water for half the population of New York State. Gatto had taken the evidence first to the local county prosecutor and then to the State Attorney General and the U.S. Attorney. Each, in turn, refused to take the case. Gatto now sat lamenting the lot of environmental crime fighters. "If a kid steals a car or breaks a window with a rock, there's not a prosecutor in the county that won't take the case—and in those cases, there is only a single victim. But if someone dumps poison into the drinking water of 9 1/2 million people, you can't get anyone to prosecute!"

Gatto's complaint is borne out by my own experience and by statistics from across the country. As Chief Prosecuting Attorney for Riverkeeper, Inc., a coalition of commercial and recreational fishermen, I have brought over 100 successful actions against Hudson River polluters, using citizen suit provisions which Congress included in the Clean Water Act and other environmental statutes. Each of these cases was an instance when a corporation or individual or municipality had broken some environmental law. And in each case, the state government enforcement agencies and federal EPA were aware of the violations, some quite serious, and had elected not to prosecute.

Many state governments have virtually stopped prosecuting environmental law violations. In 1996, the state of Maine prosecuted fewer than 50 cases under its environmental laws despite thousands of violations reported to regulators. The state of Virginia prosecuted a single polluter all year and collected less than \$4,000 in penalties. Virginia is among the most polluted states in the nation. These states are typical.

The reasons for this failure are manifold. State governments discourage environmental prosecutions in order to recruit polluting industries. Engineers who run environmental agencies often prefer “technical assistance” to prosecution which they deem antagonistic toward problem solving. State and federal prosecutors don’t see environmental crimes as “real” crimes like fraud, murder, vandalism, or theft. Most importantly, many prosecutors are intimidated by the difficulties of gathering and preserving evidence and proving environmental crimes with which they are unfamiliar. Steven Driellak’s book solves the latter problem. It teaches prosecutors how to collect and preserve evidence, how to prepare a search warrant, perform investigations, and conduct surveillance. It lays out protocols for safety and sampling techniques, methods for interpreting regulatory files and hazardous waste manifests, and how to construct a hazardous waste stinging operation.

Environmental crime *is* real crime; improperly disposed pollutants poison community water supplies, contaminate fisheries, and injure human beings. Environmental crime attacks property values, community welfare, and can damage wildlife and human health and rend the social fabric for generations. Since Roman times, western law has held that water and air and wild animals belong to the public. Modern environmental laws simply clarify with particularity the right of the public to safely fish and swim and their entitlement to clean, safe drinking water. When pollution destroys or poisons a resource, the polluter has committed an act of theft against the public. When a contaminated water supply or fishery poisons children—the polluter has committed child abuse. Pollution is crime; polluters must be treated as criminals.

Pollution laws are intended to protect public health, safety, and welfare by ensuring high water quality, enhancing ecosystem health, and reducing pollution by internalizing pollution costs into a discharger’s activities. However, merely enacting the regulations will not accomplish any of these objectives alone; only widespread compliance with the law will achieve these goals.

Polluters have no incentive to comply with environmental laws since noncompliance results in economic benefits (the free use of water or air for waste disposal) while compliance exacts a financial cost. Unchecked by aggressive enforcement, these pressures will systematically undermine any system of environmental law. James Elder, the former director of the EPA Office of Water Enforcement and Permits, observed that “[W]e have found repeatedly that nothing is self-sustaining in the National Pollutant Discharge Elimination System (NPDES) program. If a state’s vigilance or the EPA’s regional vigilance subsides, their noncompliance and point source contribution [of pollution] increase.”¹

Compliance is essential to the success of any environmental regulatory program because it is the only way that society will enjoy the benefits envisioned by environmental laws which legislatures have devised to protect the public. The vast regulatory apparatus we have put in place to protect public health and the environment amounts to mere empty words without compliance. Widespread compliance with environmental law only occurs where society enjoys the deterrent value of strict, sure enforcement. Drielak’s book brings this task within reach of every prosecutor.

ROBERT F. KENNEDY, JR.
Supervising Attorney
Pace Environmental Litigation Clinic, Inc.

1. James R. Elder et al. *Regulation of Water Quality* 22 *Envtl. L. Rep.* 10,029-10,037 (Jan. 1992).
2. Cheryl Wasserman, *Federal Enforcement: Theory and Practice Innovation in Environmental Policy*, 21,22 (T.H. Tietenberg ed., 1992).

PREFACE

The art of criminal environmental investigation has seen many changes over the last decade. During its beginning, it would be quite common for a regulatory agency to prepare an environmental criminal case against an individual or corporation and deliver the evidence to a prosecutor. Eventually, trained criminal investigators began working with various regulatory agency personnel in an effort to learn and to better prepare these cases for criminal prosecution. Today, well-trained criminal environmental investigators are taking a proactive approach to environmental crime. New evidence gathering and investigative techniques are continually being developed around the country. These new techniques, combined with the investigator's understanding of the evidence-gathering requirements of the criminal justice system, have begun to produce highly prosecutable environmental crime cases.

This book offers the new criminal environmental investigator numerous investigative techniques which may be applied to a variety of environmental crime investigations. Each of the investigative techniques and evidence-gathering procedures described in this book has been successfully used in criminal environmental prosecutions. I have also attempted to offer information on the numerous safety requirements which *must* be followed in order to safely and properly gather physical evidence at an environmental crime scene. Each chapter has been designed as a reference in order to better assist the criminal environmental investigator with the individual investigative tasks he or she may face in the future.

I would like to thank Special Agent-In-Charge Lori Dueker of the United States Environmental Protection Agency, Criminal Investigation Division, San Francisco Office, for her guidance in the preparation of this book. I would also like to thank Kenneth Hill, Director of the Suffolk County Environmental and Health Laboratory, and Senior Chemist JoAnn Laager for their gracious assistance.

CONTENTS

	<i>Page</i>
<i>Foreword by Robert F. Kennedy, Jr.</i>	vii
<i>Preface</i>	xi
 Chapter	
1. THE CRIMINAL ENVIRONMENTAL INVESTIGATOR	3
Training	3
Equipment	4
Standard Operating Procedures	5
Locating and Utilizing Resources	5
Safety Resources	5
Sampling Resources	6
 2. SEARCH WARRANTS	7
Developing Probable Cause	7
Typical Surveillance	7
Remote Surveillance	8
Regulatory Files	14
Hazardous Waste Manifest System	15
Regional Enforcement Associations	16
Worker's Compensation	17
Unemployment Records	17
Certificates of Incorporation	17
Property Records	18
Building Plans	18
Chemical Suppliers Records	18
Neighboring Businesses	19
Delivery Services	19
The Landlord	20
Multitenant Buildings	20

	<i>Page</i>
Planning	21
Determining Goals	21
Gathering Evidence	22
Equipment Requirements	22
Personnel Requirements	23
The Search-Warrant Team	23
Crime Scene Coordinator	24
Site Security Team	25
Safety Officer	25
Laboratory Team	27
Sample Team	28
Records Team	28
Interview Team	33
Raw Chemical Product Inventory Team	34
Dye Test Team	34
The Briefing	35
Chain of Command	35
Safety Officer	35
Site Investigation Team	36
Sample Team	37
Type of Industry	37
Suspected Hazards	37
Expected Protection Levels	38
Decontamination Requirements	39
Emergency Medical Care	39
Sampling Operation	40
Site History	41
Photographs	41
Facility Diagram	41
Weather	41
Site Security	42
Communications	43
Search Warrant Review	43
Search Warrant Execution	43
Public Information Officer	44
The Staging	44
Personnel Check	44
Operation's Plan Review	44
Local Police Notification	44

	<i>Page</i>
Warrant Execution	45
Serving the Search Warrant	45
Establishing Site Security	46
Parking	46
Team Deployment	46
Interior Search	46
Exterior Search	52
Postsearch Briefing	54
Sample Point Identification	55
Sampling Order	55
Volume Readings	56
Chain of Custody	56
Dye Testing	56
Releasing Team Personnel	57
Procecutor	58
Receipt	58
Closing the Search Warrant	58
Surreptitious Entry	59
Disabling Security Systems	59
Marking Hazardous Waste Containers	60
Postsearch Investigation	61
Employee Interviews	61
Chemical Inventory Review	62
Analytical Evidence Review	62
Interviewing Suspects	63
3. HAZARDOUS WASTE ABANDONMENT INVESTIGATIONS	65
Notification	67
Arrival at the Crime Scene	67
Crime Scene Coordinator	68
Safety Officer	69
Safety Team	69
Decontamination	69
Emergency Medical Assistance	70
Sample Team	70
Laboratory Team	71
Gathering Evidence in the Hot Zone	71

	<i>Page</i>
Postsearch Briefing	77
Chemical Evidence Gathering	77
Abandoned Trailer Investigations	78
Hazardous Waste Tanker Investigations	79
4. DRUM-TRACING TECHNIQUES	83
Vehicle	83
Person or Persons	86
Other Physical Evidence	86
Containers	87
Chemical Analysis	91
5. SAMPLING FOR CRIMINAL EVIDENCE	93
Sampling Plan	93
Sample Bottle Identification and Preparation	94
Sample Device Identification and Preparation	96
Types of Analysis	97
Field Tests	98
Documentation	101
Chemical Evidence Sampling	104
Sampling for Trace Analysis	109
Volume Reading Techniques	112
Photographing Chemical Evidence	116
Labeling Chemical Evidence	116
Sealing Chemical Evidence	117
The Log Book	117
Chain of Custody	118
Chemical Analysis Request Sheet	118
Transporting Chemical Evidence	119
Packaging and Shipping Chemical Evidence	119
6. CHEMICAL ANALYSIS OF CRIMINAL EVIDENCE	121
Choosing the Laboratory	121
Chemical Analysis: Instrumentation and Methodologies	126
Gas Chromatography/Mass Spectrometry	127
Inductively Coupled Plasma/Atomic Emissions Spectrometer	129
pH Meter	132
Pensky-Martens Close Cup Tester	133

	<i>Page</i>
7. HAZARDOUS WASTE STING OPERATIONS	137
Targeting Suspect Hazardous Waste Transporters	138
Planning the Operation	138
Establishing the Undercover Generator	139
Hazardous Waste Containers	140
Hazardous Waste Removal	140
Targeting Suspect Hazardous Waste Generators	141
Planning the Operation	142
Personnel Requirements	142
The Vehicle	143
Establishing the Undercover Office	144
The Criminal Transaction	144
Examining Hazardous Waste	145
Disposal	146
Investigative Files	147
<i>Appendix</i>	149
<i>Glossary</i>	157
<i>Bibliography</i>	165
<i>Table I</i>	167
<i>Table II</i>	220
<i>Index</i>	223

ENVIRONMENTAL CRIME

Chapter 1

THE CRIMINAL ENVIRONMENTAL INVESTIGATOR

TRAINING

A successful criminal environmental investigation requires the application of several different disciplines. The environmental investigator must bring basic police skills such as interviewing and interrogation, surveillance, search warrant execution, and experience in the proper handling of criminal evidence to the investigation. In addition, he or she must be trained and equipped to gather physical evidence at an environmental crime scene, in a safe and proper fashion. This requires specialized training in the handling of hazardous materials and a full understanding of the appropriate environmental laws, supporting regulations, and hazardous waste sampling and analysis protocols.

Fortunately, this specialized training is available to the criminal investigator from a variety of sources. The United States Environmental Protection Agency offers many training programs in the areas of Hazardous Materials Incident Response, Hazardous Materials Sampling, and Criminal Environmental Investigations. Many state and local agencies also offer similar courses. Many of these training programs are free and are offered throughout the country several times a year.

EQUIPMENT

The well-trained, criminal environmental investigator should also be well-equipped. Most successful criminal investigations, be they burglaries, arsons, or homicides, depend upon the investigator's ability to examine and gather physical evidence. Even in situations where evidence technicians are gathering the physical evidence, it is normally done under the direct supervision of the criminal investigator. This same basic investigative principal also applies to criminal environmental investigations. The criminal environmental investigator must be equipped with the proper crime-scene, safety and field monitoring equipment to allow for a safe and proper examination of any physical evidence found at an environmental crime scene. The following is a list of some of the items that may be utilized by the environmental investigator at a crime scene:

- Chemical boots
- Surgical gloves
- Cartridge Respirator
- Fully encapsulating suit
- Chemical suits
- Chemical gloves
- pH Paper
- Duct tape
- Measuring tape
- Steel toed boots
- Overalls
- Dosimeter
- Goggles
- Geiger Counter
- Chemical dictionary
- Binoculars
- First Aid Kit
- Bold markers
- Flashlight
- Bung wrench
- Spark-proof clipboard
- Knife
- Trash bags
- Sterilized sample bottles
- L.E.L./O₂ meter
- Compass
- Communications equipment
- 35mm Auto focus camera
- DOT Emergency Response book
- Self-contained breathing apparatus
- Spare 60 minute air bottle

STANDARD OPERATING PROCEDURES

In addition to obtaining the proper training and equipment, there is a federal requirement to establish *standard operating procedures*.¹ These standard operating procedures must address the issues of health and safety for the environmental investigators working in areas which may contain hazardous substances (see Table I), hazardous materials,² and biological hazards.³

These procedures should address such topics as organizational work plan, site evaluation, site control, monitoring, personal protective equipment, communications, and decontamination procedures. In addition, it is recommended that standard evidence gathering procedures be incorporated into the standard operating procedures. Such topics as note taking, removal of fingerprints, tire track and footprint castings, the crime scene sketch, crime scene photography, and evidence chain-of-custody procedures should be addressed within the standard operating procedure (see Appendix).

LOCATING AND UTILIZING RESOURCES

One of the most difficult challenges facing the environmental investigator is locating and utilizing the resources necessary to effectively gather evidence at an environmental crime scene. Safety and chemical sampling protocols clearly establish the need for additional personnel with special training.

Safety Resources

Whenever the presence of hazardous substances, hazardous materials, and/or biological hazards is suspected at an environmental crime scene, a qualified safety officer, a backup team, and decontamination facilities are needed. The first step in locating the resources necessary to fulfill these requirements is the identification of the local Hazardous Material Response team (HazMat).⁴ The Superfund Amendments and Reauthorization Act of 1986 (SARA), includes an emergency planning provision known as Title III. Under this legislation, each locality in the United States must establish an emergency plan to respond to the