

People, Bodies and Biospheres: Nexus and the Toxic Tort

By: Steve Kroll-Smith, [Saundra D. Westervelt](#)

Kroll-Smith, Steve and Saundra D. Westervelt. 2004. "People, Bodies, and Biospheres: Nexus and the Toxic Tort." *Law & Policy*, Special Issue: Toxic Torts and Environmental Justice 26 (2): 177-187.

Made available courtesy of Wiley-Blackwell:

<http://onlinelibrary.wiley.com/doi/10.1111/j.0265-8240.2004.00008.x/abstract>

*****Reprinted with permission. No further reproduction is authorized without written permission from Wiley-Blackwell. This version of the document is not the version of record. Figures and/or pictures may be missing from this format of the document. *****

Abstract:

This special issue on toxic torts and environmental justice is, broadly stated, a multi-vocal discussion of reform in those areas of tort law that bear on toxins, property, and bodies.

Keywords: Tort Law | Environmental Law | Toxins | Public Health

Article:

"Tort reform" is a centerpiece of the Republican Party's domestic agenda. The argument is simple and, for many, compelling: tort awards for medical malpractice, product liability, work-related accidents, and environmental damage to property and health are far too high and reflect the avarice and greed of trial lawyers. Those who differ with the Grand Old Party's agenda also make a simple and persuasive argument: reforming tort law is not the real goal here; that could be done in a number of meaningful ways that address genuine problems with both the law itself and its application. "Tort reform," rather, is a rhetorical smoke screen for immunizing powerful Republican Party contributors from the consequences of their honest mistakes, avidity, and negligence.

This special issue on toxic torts and environmental justice is, broadly stated, a multi-vocal discussion of reform in those areas of tort law that bear on toxins, property, and bodies. It begins with the assumption that the toxic tort is not an unimpeachable resource in the quest for justice. But it is a resource, nevertheless, and one we should tinker with to make more effective. In this regard, this special issue sides with those Democrats and others who believe that a genuine effort to reform tort law is worth undertaking. It also, unashamedly, focuses on the plaintiffs. Modern tort law begins with the assumption that human enterprise will, at times, father human misery. In the area of tort law that focuses on environments, this misery is rooted in the nexus between people, bodies, and the biosphere. We start at the nexus.

The excitement of the season had just begun, and then, we heard the news, oil on the water, lots of oil killing lots of water. It is too shocking to understand. Never in the millennium of our tradition have we thought it possible for the water to die, but it is true. (Chief Walter Meganack, Port Graham, 1989, in Picou & Gill 1997)

In November 1999, a Seattle newspaper alleged that nearly 200 people had died and several hundred more were afflicted with asbestos-related diseases in the small, mountain town of Libby, Montana . . . The source of problems is a defunct vermiculite mine owned by W. R. Grace & Co. (A community resident recalls trying to get the attention of Montana government agencies) I spent a week calling every agency I knew . . . asking them if they were aware 300 people had been diagnosed . . . with asbestosis including children. Each agency denied any knowledge of any problems with the mine. (Fritz 2001)

Illustrated in each of these two quotations is a phenomenological assumption about humans and environments. Joined together, these two assumptions become the ecological and moral underpinning for both the environmental justice movement and the toxic tort. For purposes of description, let us call the first assumption the *self-environment nexus*. Chief Meganack distills this bond between people and nature in his lament “[L]ots of oil killing lots of water. It is too shocking to understand.” We are cognizant of environments; we incorporate them into our routines and common ways of thinking. A person unaware of environments who acts as if they do not exist is likely to be seen, at the very least, as deluded. Human experience, in short, is always confounded with physical and organic space.

Complementing this first nexus, think of the second as the *body-environment nexus*. We experience our bodies as parts of environments. Sometimes that experience is elementary – a stimulus-response – as in the self acknowledging the body's signal that a room is too hot or cold. At other times, the experience is far more complex and requires gathering information, making deductions, seeking assistance. “I spent a week calling every agency I knew,” recalls a mother from Libby, Montana, “asking them if they were aware 300 people had been diagnosed . . . with asbestosis including children. Each agency denied any knowledge of any problems with the mine.”

A nexus, of course, is a bond, a yoking of elements and factors into something approaching a whole or totality. The self-environment nexus confounds the sentient person and the biosphere, suggesting these two categories of nature are more conceptually than empirically distinct – separated more by language than experience. At its most rudimentary, the body-environment nexus joins a reflexive individual, thinking about her body's well-being, to an awareness and experience of local environments. A more elaborated expression of this nexus is the person (or group) who deliberately seeks the cause and effect relationships of sick bodies to suspected or known environmental hazards.

Joined, these two nexus become the starting point, the elemental experiences that make the idea of environmental justice a universally recognized ideal, though one that is rarely realized. Enter, here, the toxic tort. Each nexus is a plank on the ground floor of tort law. The first plank supports the idea that people have a right to own land and property unsullied by industrial or municipal waste. The second plank upholds the idea that accidental or negligent releases of toxins into the environment pose a potential or real threat to human health. Importantly, these two nexus often appear in the same tort. Toxins in the biosphere are often a potential threat to somatic well-being. It is worth separating them, however, to examine the unique qualities of each.

A. SELF-ENVIRONMENT NEXUS

Walter Meganack, Chief of the Alutiiq in Cordova, Alaska, fashions a story about an oil spill and the death of the water. When the Exxon Valdez belched eleven million gallons of crude oil into Prince William Sound off the coast of Cordova on 24 March 1989, it posed no direct threat to the health of humans, but it polluted a pristine nature, a traditional way of life, and long-held beliefs about the relationship of people to the water and its bounty. Toxins that find their way into air, water, and soil uncouple people from their assumptions that local environments are at the very least habitable, if not nurturing. To paraphrase Kai Erikson, they are a new species of derangement.

Most of us most of the time assume an “as if” posture towards the environment (Kroll-Smith 1995). “As if” forms of consciousness are essential for what Giddens (1991) calls “ontological security” and the development of more complex social relationships. They are prelinguistic, emotively apprehended contracts between participants that the physical and organic world is both ordered and predictable. In this world, probabilities are not randomly distributed. Here, convention, tradition, and habit work reasonably well to link people to local habitats. Let us call these environments *ordinary*. What makes something ordinary is that it can be comprehended and responded to in a routine manner.

The *Webster's College Dictionary* (2000) defines “extreme” as a condition or state farthest removed from the ordinary. The idea of extreme suggests the absence of a meaningful way of comprehending an event, a circumstance, a place. What was once a matter of routine becomes an essential puzzlement or profound uncertainty. Not surprisingly, oil gushing from tankers into ancient fishing grounds, radioactive cesium blown by winds to sheep and cattle pastures, or industrial toxins meandering through underground swales surrounding houses and schools, are likely to alter human consciousness, shifting the once ordinary to the extreme. In this new world, “as if” ways of thinking are replaced by more contingent and fortuitous “what if?” ways of thinking: “What if I can no longer graze sheep in fields contaminated with low-level radioactive waste?” “What if my property value falls precipitously because the liner in a municipal waste facility down the road rotted and is jettisoning toxic sludge?”

B. BODY-ENVIRONMENT NEXUS

In a small mining town with a population of 2,700, over two hundred people are dead from asbestosis, including several children. “But the biggest catalyst came when the first two children of a miner were diagnosed . . . That was a the real warning bell . . . if they could get sick, who else could?” (Fritz 2001). Residents of Libby, Montana are accustomed to seeing gaping holes in the earth and mountains of sludge and debris. The mine was the primary employer; people were apt to ignore or look away when W. R. Grace committed a safety violation or other delict. But poisons from the mine began to seep into the bodies of more than the miners; women and children were sick – some were dying.

Writing more than fifty years ago, Abraham Maslow (1954) offered his theory of humanistic psychology based on what he called the “hierarchy of needs.” Presaging the body-environment nexus, the bedrock of Maslow's five-tier hierarchy is the body's access to potable water, clean air, and soil free of harmful contaminants. In the absence of these resources, the self is stymied in its efforts to grow and develop as the body becomes burdened with environmental toxins. Healthy environments, in short, are essential for human health.

Maslow assumed an intimate relationship between bodies and environments. Most of us, employing some variant of mundane reasoning, would agree with him. We are likely to reason in a manner that connects our bodies to local environmental contexts and conditions. Our mundane reasoning, however, is often incompatible with the risk-based reasoning of industries and government agencies.

These organizations are more likely to view bodies and environments as two ontologically discrete things. In a world enunciated with discrete categories, experts claim to “know” where our bodies end and the environment begins. Categories are rarely impartial. More often than not, they are tautological expressions of political and social authority; they confirm what they create. Joe Thornton's *Pandora's Poison* (2000) illustrates this point nicely in reference to the separation of bodies and environments. By assuming a categorical distinction between these two *living* entities, it is possible for regulatory authorities to issue a “pollutant discharge permit” licensing the right to contaminate environments as “long as the exposure is below the ‘threshold’ at which” environmental toxins adversely affect bodies (ibid.: 7). Explicit here is the idea that bodies and environments are sufficiently disparate to identify, through rigorous science, those numerical coefficients that warrant contaminating soil, water, and air without allegedly harming humans. Evidence for doubting the presumed discrimination of bodies and environments is readily available.

Libby, Montana is a particularly severe case, but thousands of communities and neighborhoods throughout the U.S. are besieged with toxins. The Center for Health, Environment and Justice (CHEJ), for example, supports over 5,000 local environmental groups in their efforts to abate the flow of toxins and hold responsible parties accountable (CHEJ 2000). The General Accounting Office (GAO) estimated in 1995 “anywhere from 130,000 to over 425,000 sites throughout the

nation contain some contamination” (GAO 1995). And there is evidence this contamination is finding its way into bodies.

A 1986 Environmental Protection Agency (EPA) *Executive Summary* on chemicals in human tissue reports an array of troublesome data. One hundred percent of adults in the U.S. carry measurable levels of styrene and ethyl phenol in their bodies. Ninety-six percent of adults embody clinical levels of chlorobenzene, benzene, and ethyl benzene; 91 percent live with toluene in their bodies; and 83 percent are contaminated with polychlorinated byphenols (Stanley 1986). The federal Center for Disease Control (CDC) reports that virtually every person who has lived in the U.S. since 1951 was exposed to radiological fallout and that “all organs and tissues of the body have received some radiation exposure” (Glanz 2002). The CDC also recently released data on twenty-seven toxins found in a cross-section of U.S. residents in what is the first annual “snapshot of the toxic load Americans carry” (Revkin 2003). Mercury and phthalates (a toxic derivative of plastics) are now commonly found in the bodies of all adults living in the U.S. The boundary between bodies and nature is, the evidence shows, permeable, an idea easily deduced from the body-environment nexus. But there is more one can say here about the idea and reality of nature.

The “nature” of post-industrial society is – to be blunt – no longer “natural.” It is our clumsy hand that now pilots spaceship earth. Seeking to capture this new history, McKibben (1990) refers to it as the time when nature ended. And he is right, if by nature we mean land, water, air, and soil unencumbered by human effluents, residues, and other flotsam and jetsam of industrial culture. Natural nature, in short, is replaced by, what Giddens (1991) calls, a *socialized nature*. We now manufacture nature, though unintentionally and without a clear understanding of its effects on human well-being. Nature as a natural phenomenon will survive in our literatures and imaginations, but it is no longer the real, tangible nature that nurtured us and assured our survival as a species.

The human spoiling of nature and its unfortunate consequences for human well-being is a motive force in contemporary U.S. history. As far back as 1982, 45 percent of a random sample of Americans reported the environment adversely affecting their health. By 1992 that number increased 22 percent to 66 percent. More troubling, an arresting 83 percent of the U.S. sample believes that over the next twenty-five years environmental pollution will damage their children's health (Dunlap, Gallup & Gallup 1992).

As a species, humans are coupled to environments in two seemingly primordial ways: through a reflexive consciousness rooted in the self and through our body's organic organization and life requirements. The self-environment and body-environment nexus, we suggest, is the rudimentary warrant for the relationship of tort law to toxics, people, and communities.

II. TWO TYPES OF LAW

Two types of laws safeguard human health and property in the U.S. Public law, or the regulatory statutes of government, and private law, particularly the law of torts. Public law is a strong tool in protecting both environments and the adverse effects of toxic environments on human health. Congress enacted the National Environmental Policy Act or NEPA – frequently called “the Magna Carta” of environmental laws – in 1969 to “encourage productive and enjoyable harmony between man [sic] and his environment; to . . . prevent or eliminate damage to the environment . . . and stimulate the health and welfare of man [sic]” (NEPA 1969: § 2). Congress passed a second key piece of environmental law, the Clean Air Act, in 1990. Its primary purpose is to regulate what the EPA calls “criteria air pollutants,” contaminants that pose significant human health risks above a permissible level of exposure (EPA 1990).

These and other regulatory laws are keystones in protecting environments and human health. But like all regulations, they are subject to political calculations, if not blatant manipulations. The current Republican Administration, for example, is proposing to weaken NEPA by streamlining environmental impact statements. In September 2002, President George W. Bush issued an executive order to speed-up environmental impact assessments and shorten the length of time allowed for public comment on these reports. This administration also is reducing the effectiveness of the Clean Air Act by allowing energy and other polluting industries to upgrade their technologies without also adding modern pollution controls. This is in violation of the Act's New Source Review Policy that requires companies who are upgrading their production technologies also to upgrade their pollution emission hardware. Public law, in short, is susceptible to an interest-driven politics that reduces its capacity to protect both environments and health.

The vulnerability of environmental public law to political (mis)management is reflected in a recent study that ranked 142 countries according to their respective regulations protecting public health from environmental risks. The U.S. was ranked fifty-first, below Cuba and Botswana (Esty 2002). Regulatory law mixes poorly with politics and highlights the need for tort law to protect and compensate victims.

Private law in the U.S., that is, the law of torts, provides an additional mechanism through which plaintiffs affected by environmental hazards can pursue redress and compensation. Additionally, toxic torts, and class action toxic torts in particular, serve as a potential tool of deterrence, as juries can return large monetary verdicts against corporate dumpers and polluters. Toxic tort litigation can be a valuable weapon also for those poor and minority group citizens often most impacted by toxic pollutants.

Like its counterpart, public law, tort litigation also is a target of conservative and corporate interests who are working under the guise of “tort reform” to weaken both its reach and its impacts. Tort reform advocates charge that increasing numbers of plaintiffs clog the U.S. courts with frivolous claims trumped up by greedy plaintiffs’ attorneys, resulting in a deluge of large punitive damage awards for undeserving citizens. As a result of such misplaced litigiousness,

insurance premiums have increased, corporations have lost their competitive edge, and lawyers have become the only ones who truly benefit. Although these charges lack empirical support (Galanter 1998), they nevertheless resonate within a conservative, pro-business political climate.

The rhetoric of tort reform is proving successful in limiting the effective use of toxic tort litigation to compensate victims, deter polluters, and secure a measure of environmental justice. Capping punitive damage awards, for example, is one potent tool of tort reform. Such limits reduce the potential deterrence message that a large punitive damage award sends to malfeasors, while also reducing the likelihood that such cases will even be initiated. Given the incredible cost associated with the development and pursuit of a viable toxic tort case and the fact that plaintiffs are most likely to be poor, plaintiffs' attorneys must have confidence in the potential for a significant damage award in order to anticipate covering their expenses. Consider a restrictive view of damage awards endorsed recently by the Supreme Court in *State Farm Mutual Automobile Insurance Co. v. Campbell* 2003. In a 6–3 decision, the Court suggested that anything above a single digit punitive-to-compensatory damage ratio could be a violation of the due process rights of the defendant. State Farm's profit margin in 2002 was \$49 million.¹

In addition to capping awards, tort reform is seriously affecting the use of evidence and expertise in toxic tort litigation by arguing for a strict reading of the landmark case *Daubert v. Merrell Dow Pharmaceuticals, Inc.* 1993. What is now called the “*Daubert* ruling” granted trial judges wide discretionary power to include or exclude expert testimony in tort cases. While *Daubert* was expected to create a more flexible approach toward the admissibility of expert testimony, a review of federal cases from 1993 to 1995 reveals that half of them denied the credentials or the evidence of experts. State courts are following suit (Kroll-Smith & Jenkins 1996: 6). Because the complexity of toxic torts mandates the need for a wide variety of experts and evidence, unreasonable standards for admissibility serve only to reduce plaintiff access to litigation.

In spite of the serious challenges posed by the tort reform movement, toxic torts remain an increasingly important legal tool in a world awash in the flotsam of a manufactured nature and vulnerable to the political manipulation of regulatory law. These torts are increasing in number and by all accounts are here to stay (Macchiaroli Eggen 2000). Though increasingly common, the toxic tort is anything but simple. This variant of tort law is an admixture of health, risk, and proof of causation puzzles mingled with interpretations of regulatory law, case management nightmares, and ethically dubious defense strategies. The synergistic effects of these complicating factors combined with the steady drumbeat of tort reform make the toxic tort one of the most challenging arenas of judicature in American law.

III. TOXIC TORTS, A SPECIAL ISSUE

This special issue of *Law & Policy* addresses several of the more salient social and cultural themes, issues, and conundrums of the toxic tort. Among the actions that fall under the header “toxic tort” are administrative efforts to clean-up hazardous waste, civil lawsuits, and workers’

compensation claims, to name a few. The common claim of these diverse legal actions is the release of toxins into air, water, or soil and their present or future adverse effects on human health. The toxic tort represents and adjudicates the nexus between self-conscious, reflexive people, their bodies, and adverse environments.

Artfully complex, a toxic tort is more like a Russian Matryoshka doll, one problem or challenge hiding another that in turn is hiding yet another with no end in sight; and each problem is likely to invite an array of experts with an array of epistemic claims on some version of truth. Consider, for example, the seemingly simple idea of exposure, obviously a key claim.

Start with the methods of exposure that include, but are not limited to, “absorption, contact, ingestion, inhalation, implantation or injection” (Macchiaroli Eggen 2000: 3). Add the important question of whether the exposure was known or unknown (*ibid.*: 3). Now, try to determine the body's past exposure history and do not forget to calculate the dose-response relationship. Lastly, be prepared to answer the inevitable questions regarding etiological origins and diagnostic validity raised by both defense attorneys and judges. And this is only the nested challenge of exposure. Joining the conundrums of evidence inherent in the toxic tort is a montage of social psychological, sociological, political, and equity issues, each its own Matryoshka doll of nested dilemmas and perplexities.

The toxic tort, to twist a favored expression of Levi Strauss, “is hard to think.” One purpose of this special issue is to clarify our thinking about this genre of civil litigation by discussing the daunting variety of issues and problems embedded in the real politic of this law. A second, and related, purpose is to recommend several modest policy changes in the administration of this law that would make it a more effective tool of redress in those unfortunate occasions when bodies and manufactured natures collide.

A variety of disciplines are represented in this special issue, reflecting the complex and interdisciplinary themes of the toxic tort. Environmental sociologists and their colleagues in the sociology of law join law faculty and practicing attorneys to bring considerable breadth to this discussion. The papers are organized to move from law and politics-centered discussions of the toxic tort to social and cultural-centered discussions of several contemporary tort cases. The final two papers use case studies of several toxic torts and environmental disputes to make the point that class action tort cases are not necessarily the most effective strategies for achieving justice.

In “Toxic Torts, Politics, and Environmental Justice: The Case for Crimtorts,” Thomas Koenig and Michael Rustad (2004) take the interesting position that the toxic tort is a potent legal strategy that combines both criminal law and civil law to punish and deter polluters. Plaintiffs in these cases serve not only their own immediate need for compensation but also contribute to a public good by deterring polluters. The success of the toxic tort is measured against increasing government and corporate resistance to it. Allan Kanner (2004) expands the idea of compensation to include the possibility of using unjust enrichment remedies to insure that

polluters do not benefit from the use of a resource at the expense of the victims. In “Equity in Toxic Tort Litigation: Unjust Enrichment and the Poor,” Kanner offers a bold challenge to industries that pollute and profit simultaneously, and adds another salient concern to the advocates of tort reform. In “*Daubert* and the Exclusionary Ethos,” Gary Edmond and David Mercer (2004) offer a creative reading of the “post-*Daubert*” culture that demonstrates a strong bias towards limiting, if not excluding, entire genres of expert knowledge and practices from tort law. This culture is shaped and promoted by corporate-sponsored amicus briefs and influential neo-conservative institutes promoting the volatile idea of junk science.

Melissa Toffolon-Weiss and J. Timmons Roberts (2004) shift discussion from the strictly legal-political arena to the real politic of waging toxic torts. In “Toxic Torts, Public Interest Law, and Environmental Justice: Evidence from Louisiana,” they compare four bellwether cases from Louisiana to examine the relative effects of toxic tort litigation versus filing an administrative complaint with a federal agency. The effects vary, but the authors conclude that class action torts, at least the ones they examine, are not particularly effective strategies for achieving environmental justice. Lastly, this paper makes a strong argument for a compelling idea: to wit, legal actions, whether they are toxic torts or administrative complaints, do not occur in a vacuum. Parts of complex social and cultural environments, they link plaintiffs and defendants to regional and national movements, plaintiff support networks, and the availability of public interest law resources.

Finally, Brent Marshall, Steve Picou, and Jan Schlichtmann (2004) make a case for the marked psychosocial impacts of tort litigation on plaintiffs following an environmental disaster. In “Technological Disasters, Litigation Stress, and the Use of Alternative Dispute Resolution Mechanisms,” the authors examine longitudinal data on a cohort of Alaskan residents following the *Exxon Valdez* oil spill. Tellingly, these data strongly suggest that prolonged litigation itself can be a clinical stressor in people's lives. A suggestion is proffered: when it is possible, bypass litigation and use some variation of the alternative dispute resolution strategy.

These five papers are a complex critique of toxic torts and the problems of social justice that together make this novel and emergent legal arena an inviting topic for reflection and discussion.

NOTE

- 1) Details can be found at <http://biz.yahoo.com/ic/40/40445.html>.

Footnotes

1. Steve Kroll-Smith is Head and Professor of Sociology at the University of North Carolina at Greensboro. He is the author of several books on disasters, environments, and health.

2. Saundra D. Westervelt is an Associate Professor of Sociology at the University of North Carolina at Greensboro. She is the author of two books on criminal defense and wrongful convictions.

REFERENCES

- Center for Health, Environment and Justice (CHEJ) (2000) *Executive Summary*. Falls Church, Va.: Center for Health, Environment and Justice.
- Dunlap, Riley E., George H. Gallup, and Alec M. Gallup (1992) *The Health of the Planet Survey*. Princeton, N.J.: George H. Gallup International Institute.
- Edmond, Gary, and David Mercer (2004) “*Daubert and the Exclusionary Ethos: The Convergence of Corporate and Judicial Attitudes towards the Admissibility of Expert Evidence in Tort Litigation,*” *Law & Policy* **26**: 231–57.
- Esty, Daniel (2002) “Finland Number One in Environmental Health,” *New York Times* 2 February: Science Section 1.
- Fritz, Jane (2001) “Scarred Paradise: A Montana Tragedy,” *Cascadia Times*. Available at <http://www.times.org/archives/2001/libby.htm>.
- Galanter, Marc (1998) “Reading the Landscape of Dispute: What We Know and Don't Know (and Think We Know) About Our Allegedly Contentious and Litigious Society.” In *Before the Law*, 6th ed., edited by J. J. Bonsignore, E. Katsh, P. D'Errico, R. M. Pipkin, S. Arons & J. Rifkin. Boston: Houghton Mifflin Co.
- Giddens, Anthony (1991) *Modernity and Self-Identity*. Stanford, Calif.: Stanford Univ. Press.
- Glanz, James (2002) “Almost all in U.S. Have Been Exposed to Fallout, Study Finds,” *New York Times* 1 March: A-1.
- Kanner, Allan (2004) “Equity in Toxic Tort Litigation: Unjust Enrichment and the Poor,” *Law & Policy* **26**: 209–30.
- Koenig, Thomas, and Michael Rustad (2004) “Toxic Torts, Politics, and Environmental Justice: The Case for Crimtorts,” *Law & Policy* **26**: 189–207.
- Kroll-Smith, Steve (1995) “Toxic Contamination and the Loss of Civility,” *Sociological Spectrum* **15**: 377–96.
- Kroll-Smith, Steve, and Pamela Jenkins (1996) “Old Stories, New Audiences: Sociological Knowledge in Courts.” In *Witnessing for Sociology: Sociologists in Court*, edited by S. Kroll-Smith & P. Jenkins. Westport, Conn.: Praeger.

- Macchiaroli Eggen, Jean (2000) *Toxic Torts in a Nutshell*. St. Paul, Minn.: West Publishing Co.
- Marshall, Brent K., J. Steven Picou, and Jan R. Schlichtmann (2004) “Technological Disasters, Litigation Stress and the Use of Alternative Dispute Resolution Mechanisms,” *Law & Policy* **26**: 289–307.
- Maslow, Abraham (1954) *Motivation and Personality*. New York: Harper.
- McKibben, Bill (1990) *The End of Nature*. New York: Anchor Books.
- Picou, J. Steven, and Duane A. Gill (1997) “The Day the Water Died.” In *The Exxon Valdez Disaster*, edited by J. S. Picou, D. A. Gill & M. J. Cohen. Dubuque, Iowa: Kendall/Hunt Publishing Co.
- Revkin, Andrew (2003) “Study Finds Lower Levels of Old Toxins but New Trends Are Worrying,” *New York Times* 1 February: A-1.
- Stanley, Jon S. (1986) *Broad Scan Analysis of Human Adipose Tissue, Executive Summary*. Vol. 1, Environmental Protection Agency Contract b560/5-86/035. Springfield, Va.: National Technical Information Service.
- Thornton, Joe (2000) *Pandora's Poison*. Cambridge: MIT Press.
- Toffolon-Weiss, Melissa, and J. Timmons Roberts (2004) “Toxic Torts, Public Interest Law, and Environmental Justice: Evidence from Louisiana,” *Law & Policy* **26**: 259–87.
- U.S. Environmental Protection Agency (EPA) (1990) *The Plain English Guide to the Clean Air Act*. EPA-400-K-93-001. Washington, D.C., Environmental Protection Agency.
- U.S. General Accounting Office (GAO) (1995) *Resources, Community, and Economic Development Division B-261177*. Washington, D.C.: General Accounting Office.
- *Webster's College Dictionary* (2000) *Webster's College Dictionary*. New York: Random House.

CASES CITED

Daubert v Merrell Dow Pharmaceuticals, Inc., 509 US 579, 113 SCt 2786, 125 L Ed2d 469 (1993).

LAWS CITED

Clean Air Act, S. 1630, 42 USC (1990).

National Environmental Policy Act, PUB L No. 91-190, 42 USC 4321 (1969).