

Simone M. Müller

Hidden Externalities: The Globalization of Hazardous Waste

This article focuses on chemical retailers Jack and Charles Colbert to, first, show the externalization processes linked to the greening of U.S. industry through stricter consumer and environmental protection regulations and, second, illustrate the limitations of nationally framed environmentalism targeting businesses in a global market. Throughout the 1970s and 1980s, the Colberts traded chemicals that the U.S. Environmental Protection Agency had banned for use in the United States. They exported them legally to countries where the material was still a permitted commodity—primarily in the global South. Rare interview material illustrates how the exporters justified their unequal business deals by misappropriating the meaning of recycling.

Keywords: externalities, hazardous waste, waste trade, globalization, environmental turn, chemical industry, surplus chemicals, Colbert brothers

On June 9, 1986, the U.S. District Court for the Southern District of New York convicted two brothers in a criminal court case that would stand out in business history. At the end of an unremarkable six-day trial, the court found Charles and Jack Colbert guilty of fraudulently shipping hazardous and impure chemicals to a chemical company in Zimbabwe.¹ In 1983, the Zimbabwean company, Chemplex Marketing Corp., had ordered \$55,000 worth of perchlorethylene and

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¹ Edward Hudson, "A Federal Judge Finds 2 Brothers Guilty of Fraud," *New York Times*, 16 June 1986.

trichloroethylene, two chemicals used in dry cleaning and machinery cleaning. Instead of the pure chemicals, the Colbert brothers had shipped recycled and watered-down material. Unfortunately for the Colbert brothers, the contract between them and Chemplex had been arranged under a program in which the U.S. Agency for International Development (USAID) financed purchases for overseas firms as a way of bolstering economic ties.² Essentially, the Colbert brothers had been defrauding not Chemplex, but the U.S. government. Charles Brieant, chief judge of the U.S. District Court, ordered the Colbert brothers to make restitution of \$66,000 to the victims. He sentenced the brothers to thirteen years' prison time and fined their two companies, Signo Trading International and SCI Equipment and Technology, each \$250,000.³

By 1986, the Colbert brothers had been active for more than a decade in what they called the "surplus chemicals business."⁴ They bought all sorts of chemicals and chemical products—ranging from oxidizers, poisons, acids, alkalis, and pesticides to slightly contaminated toothpastes—recycled some of it into usable chemicals, and disposed of the rest. Their primary focus lay on those chemicals that the U.S. Environmental Protection Agency (EPA) had banned for sale in the United States. Instead of disposing of these chemicals as hazardous waste in the United States, the Colberts exported them legally to countries where the material was still a permitted commodity. From an inner-city suburb of New York City, they ran a small-scale, yet extremely lucrative chemical retail business with almost a dozen warehouses in New Jersey, Delaware, New York, Pennsylvania, and Ohio. They served industrial customers all over the global South.

While journalists, NGOs, and American diplomats considered the Colbert brothers' export schemes as morally defrauding and environmentally problematic, Charles and Jack Colbert proclaimed they were doing society a favor, a service even. After all, their business led to the "recycling" and "reusing" of "surplus chemicals." Instead of disposing of hazardous material expensively in the United States, while at the same time those very same chemicals were re-produced somewhere else in the world, the Colbert brothers helped move chemicals from places where they were useless to places where they were useful. This

² UPI, "Two Brothers Who Ran a Chemical Business," UPI, 28 July 1986. On the history of the relationship between environmental policy and economic growth in the developing world, see Charles Pearson, ed., *Multinational Corporations, Environment, and the Third World* (Durham, 1987).

³ UPI, "Two Brothers who Ran a Chemical Business."

⁴ Charles Colbert, interview, in Bill Moyers and Lowell Bergman, "Global Dumping Ground," *Frontline*, PBS, 2 Oct. 1990, 4:38.

was a win-win situation for the entire international community, according to the brothers. It allowed for economic growth, conservation of industrial resources, and environmental protection all at the same time—albeit not at the same place. Their chemical retail business was, in their own words, “symbiotic to both [them] and the society.”⁵

The international trade in hazardous substances—to employ a broad term for a global trading network that moves items ranging from hazardous waste to banned pesticides and nonmarketed consumer products—received considerable attention from environmental, health, and human rights activists, investigative journalists, administrators, and policymakers throughout the 1970s, the 1980s, and up to the mid-1990s. In the early years, the focus lay on the international marketing of restricted or banned pesticides, including Kepone and DDT, with high-profile American media actors, such as PBS and the Center for Investigative Reporting, publishing award-winning material.⁶ During the 1980s, the attention shifted from outdated pesticides to the shipment of waste from industrial nations’ disposal sites.⁷ In the late 1980s and early 1990s, environmental activist organization Greenpeace ran a big international campaign against the trade in hazardous waste that was crucial to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, a 1989 UN treaty that entered into force in 1992. Public, activist, and policy attention faded after the negotiations of the Bamako Convention on the Ban of the Import into Africa and the Control of the Transboundary Movement of Hazardous Wastes within Africa by the Organization of African Unity in 1991, which entered into force in 1998. Discussion resurfaced in the 2000s with a new focus on e-waste and recycling and received another considerable push after China’s most recent ban on plastic imports from abroad, starting in January 2018.⁸

Scholars working on the global waste economy in the era relevant to this historical case, such as Jennifer Clapp, Christoph Hilz, and Kofi Asante-Duah and Imre Nagy, focus primarily on the macrolevel of

⁵ Colbert interview, in “Global Dumping Ground,” 5:48.

⁶ David Weir and Mark Schapiro, *Circle of Poison: Pesticides and People in a Hungry World* (Oakland, CA, 1981); Ruth Norris, ed., *Pills, Pesticides and Profits: The International Trade in Toxic Substances* (Croton-on-Hudson, NY, 1982); Jane H. Ives, ed., *The Export of Hazard: Transnational Corporations and Environmental Control Issues* (Boston, 1985).

⁷ Bill D. Moyers, *Global Dumping Ground: The International Traffic in Hazardous Waste* (Washington, DC, 1990).

⁸ Lieselot Bisschop, *Governance of the Illegal Trade in E-Waste and Tropical Timber: Case Studies on Transnational Environmental Crime* (London and New York, 2016); Michikazu Kojima and Etsuyo Michida, eds., *International Trade in Recyclable and Hazardous Waste in Asia* (Cheltenham, 2013); John Reed and Leslie Hook, “The Global Recycling Crisis: Why the World’s Recycling System Stopped Working,” *Financial Times*, October 24, 2018.

policy and legal analysis, distancing themselves from the more indignant tone of much activist rhetoric and some (not all) investigative journalism.⁹ Most studies' focal point is the Basel Convention and its effectiveness (and deficiencies), as in Katharina Kummer's work, or they assess the treaty's effects on international trade, as done by Jonathan Krueger.¹⁰ Broadly, they all agree that stricter environmental legislation in industrial countries, rising costs for disposal, and considerably increasing amounts of toxic waste have made it more attractive financially to operate in the relatively unregulated markets in the global South. Moreover, they attest to the failure of the Basel and Bamako Conventions to provide an international governance system that would make such externalization practices unattractive. As Emily Brownell, among others, illustrates, the trade in hazardous substances continued almost entirely unchanged, with the labels "waste" and "disposal" merely replaced by "recycling."¹¹

The challenge of macrostudies is to shed light on smaller units. From the authors mentioned above, we learn little that is concrete about the people, businesses, and environments involved and specific trading schemes carried out (or prevented), let alone an in-depth narrative of the social, cultural, and environmental history leading up to Basel and Bamako to begin with. Yet, narratives are important elements in ordering reality and they unfold the potential to frame the way members of an organization or citizens of a nation see the world.¹² In order to understand the world of the global waste economy at a particular point in time, we need to extrapolate what function retail businesses, such as that of the Colberts, that neither manufactured hazardous substances nor managed hazardous waste had in facilitating the export of hazardous substances. Where do they stand vis-à-vis multinational corporations that moved not only hazardous products, but entire production lines to less regulated markets? How did those businesses "dumping" hazardous substances—to use the jargon of activists at the time—justify their

⁹ Jennifer Clapp, *Toxic Exports: The Transfer of Hazardous Wastes and Technologies from Rich to Poor Countries* (Ithaca, 2010); D. Kofi Asante-Duah and Imre V. Nagy, *International Trade in Hazardous Wastes* (Abingdon, 1998); Christoph Hilz, *An Investigation of the International Toxic Waste Trade* (New York, 1992).

¹⁰ Katharina Kummer, *International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules* (Oxford and New York, 1995); Jonathan Krueger, *International Trade and the Basel Convention* (London, 1999); Alan Andrews, "Beyond the Ban: Can the Basel Convention Adequately Safeguard the Interests of the World's Poor in the International Trade of Hazardous Waste?," *Law, Environment and Development Journal* 5, no. 2 (2009): 167–83.

¹¹ Emily Brownell, "Negotiating the New Economic Order of Waste," *Environmental History* 16, no. 2 (2011): 262–89.

¹² Per H. Hansen, "Business History: A Cultural and Narrative Approach," *Business History Review* 86, no. 4 (2012): 693–717.

unequal trading schemes publicly? Finally, what role did these toxic export businesses assign themselves in contemporary debates on the “greening” of U.S. industries? Getting close to some of these questions gives us insight into how the small units that built up the system of the international trade in hazardous waste framed the system itself ideologically and justified their role and actions within it.

Charles and Jack Colbert are some of the very few international hazardous-waste traders to be brought to court and convicted. They are also two of the few traders who were prominently featured in a TV documentary. The story of the two brothers provides a glimpse into the half-hidden and semilegal structures of the gray market of the global waste economy.¹³ Usually, scholars investigating the international trade in hazardous waste encounter several dead ends. Potentially always on the verge of illegality, or risking post-action liability, hazardous-waste dealers avoid opening their archives—if any of these small-scale trading businesses kept one at all. Even after they had been imprisoned, the Colbert brothers fought a fierce legal battle to keep EPA off their property. While quick to grant interviews, the Colbert brothers did not open their books and records.¹⁴ In addition to such standoffishness by traders, trade data is also difficult to compile. For the pre-Basel era, data on the amount of U.S. hazardous waste produced, let alone traded, is lacking or inadequate. For much of what the Colbert brothers stored, for instance, their contemporaries—ranging from industry, the EPA, and the Department of Justice to members of the U.S. Congress and administrators—struggled over whether to classify and regulate it as solid waste, hazardous waste, or hazardous substance.¹⁵ The numbers provided by EPA and the U.S. General Accounting Office pertaining to hazardous waste produced in the United States differ by 150 million tons.¹⁶ Moreover, EPA responses to requests for information under the Freedom of Information Act indicate that it did not start keeping records on U.S. exports of hazardous waste until 1986, and unfortunately, according to the agency, it does not keep those records longer than five years. Yet, when traders are brought to trial, court

¹³ Berndt H. Brikell, “Trading Waste in the Mediterranean,” in *Coastal Zone Management in the Mediterranean Region*, ed. D. Camarda and L. Grassini (Bari, Italy, 2002); Associated Press (AP), “Court Upholds Conviction for Phony Chemicals Scam,” *Courier-News*, 3 Mar. 1987.

¹⁴ Environmental Protection Agency (EPA), *Superfund Post Remediation Accomplishments: Uses of the Land and Environmental Achievements* (Washington, DC, 1996), 136.

¹⁵ Jacob S. Scherr, “Hazardous Exports: U.S. and International Policy Developments,” in Pearson, *Multinational Corporations*, 129–48.

¹⁶ Joshua Karliner, “Backyard Dumping: Toxic Waste Export to the Third World,” n.d., Delaware Valley Toxic Coalition Records, Environmental Project on Central America, Urban Archives, Temple University, Philadelphia.

proceedings, media reports, EPA investigations, and NGO documents bring to light what otherwise remains hidden.¹⁷ Environmental journalism and activists' whistle-blowing are also key for scraping beneath the surface of macroanalyses, as are more unusual avenues of inquiry, such as leaked material and private photo collections online.¹⁸ In the case of Jack and Charles Colbert, it is primarily through their myriad interviews with news outlets, and not necessarily their books and records that they preferred to keep hidden or lost, that the Colbert brothers themselves provide insights into their business world. Additional material comes from their various court litigations and numerous investigative pieces on the two brothers. Charles and Jack Colbert were colorful figures who fascinated both the public and the media. Their businesses were often set up in residential areas and their neighbors wondered about what was going on in these warehouses.

This article connects a macrolevel discussion on the global waste economy, characterized by often-necessary generalizations about the externalization of hazardous material or concepts of slow violence and toxic colonialism, with the microlevel of actual people, businesses, and environments involved in those unequal trading schemes.¹⁹ It aims to reinsert the human element while moving beyond anecdotal evidence and to provide personal insights into the business world of those trading. The article illustrates not only how Charles and Jack Colbert took the United States' growing environmental concern and increasingly strict health and environmental regulations and turned them against the rest of the world, but also how a nationally framed U.S. environmentalism and a "prior informed consent" export policy provided them the opportunity to do so. Additionally, the article demonstrates how Charles and Jack Colbert misappropriated one key principle of recycling to justify their business schemes: that is, why throw away what could still be used? The article invites reflection on our use and abuse of those elements that are so crucial to our modern industrial way of life—hazardous chemicals.

U.S. Environmentalism and the Emergence of "Surplus Chemicals"

By the time of their conviction, Charles and Jack Colbert had been in what they called the "surplus chemical business" for close to fifteen years.

¹⁷ The Colbert brothers were indicted at least six times during the 1980s and 1990s.

¹⁸ Jim Vallette and Heather Spalding, *The International Trade in Wastes: A Greenpeace Inventory* (Washington, DC, 1990).

¹⁹ Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA, 2011). Importantly, see also Susanna Bohme, *Toxic Injustice: A Transnational History of Exposure and Struggle* (Oakland, CA, 2014).

They had entered the business in 1973, at an ambivalent moment for the U.S. chemical industry. While profits were high and the business continuously expanding, it also faced harsh criticism from the American public regarding its products and business conduct.²⁰

When the Colbert brothers set up their chemicals dealer business in 1973, U.S. production and consumption patterns were firmly in the hands of the chemical industry. At the beginning of the twentieth century, the U.S. chemical industry had already represented an important national economic factor, but after World War II chemicals production skyrocketed. Between 1947 and 1978, the annual manufacture of chemicals increased more than 900 percent.²¹ Chemicals had become important not only for the dye and armament industries, but to agriculture and pharmaceuticals as well. The production of drugs, food additives, cosmetic ingredients, synthetic fertilizers, and pesticides all depended on the expanded production of a vast spectrum of chemical substances. The introduction of synthetic polymers, produced from petrochemical derivatives, added a new industry that grew at extraordinary speed. Polymers were used in a variety of manufactured products, including synthetic fibers, coating materials, and plastic. They became the basis for an almost limitless number of consumer products such as plastic bottles and vinyl floor tiles. Estimated consumption of chemicals per head in the United States rose from \$160 in 1963 to \$290 in 1973 and to \$495 in 1977.²²

Almost parallel to such magnificent growth of the chemical industry, different groups in the United States also became wary of its products. In particular, Rachel Carson's book *Silent Spring* (1962), on the adverse effects of pesticides on wildlife, ecosystems, and humans, provoked anxieties about the indiscriminate use of synthetic chemicals.²³ The book utterly transformed the public debate about the use of pesticides. Where there had once been "miracle pesticides," many Americans now looked upon substances such as DDT as threats to human life and safety.²⁴ Other environmental scandals at the time—such as the Santa Barbara oil spill, the burning of the Cuyahoga River, and the Great Lakes' mercury crisis—had the public directing its criticism increasingly

²⁰ "Signo Trading International, Ltd.," New York DB, accessed 6 Nov. 2017, <https://newyorkdb.com/company/239646/signo-trading-international-ltd>.

²¹ Norris, *Pills, Pesticides and Profits*, 5.

²² Norris, 6. See also Benjamin Ross and Steven Amter, *The Polluters: The Making of our Chemically Altered Environment* (Oxford, 2010), 17–26.

²³ Frederick Rowe Davis, *Banned: A History of Pesticides and the Science of Toxicology* (New Haven, 2014), xi.

²⁴ David Kinkela, *DDT and the American Century: Global Health, Environmental Politics, and the Pesticide That Changed the World* (Chapel Hill, 2011).

toward the U.S. chemical industry.²⁵ During the 1960s, people's concerns about the indiscriminate use of chemicals merged with other environmental anxieties of the time, such as pollution, preservation, and population growth. On April 22, 1970, these concerns converged into a mass environmental movement with people from every strata of society on the United States' first Earth Day.²⁶ That same year, newly elected U.S. president Richard Nixon proclaimed the 1970s as the "environmental decade."²⁷ Congress passed the Clean Air Act (1970), the Federal Environmental Pesticide Control Act of 1972, and the Clean Water Act (1972). Newly created institutions such as EPA and the Council on Environmental Quality shepherded environmental concerns closer to the center of policymaking.²⁸

At the time, the issue of toxic substances was a significant political concern. In 1970, the creation of the EPA coincided with the culmination of a public debate about the use of DDT. In 1971, a U.S. Court of Appeals ordered EPA to consider suspending DDT's registration immediately. Hesitant at first, the agency yielded to public pressure.²⁹ During the 1970s, EPA banned a series of synthetic chemicals, including not only the infamous insecticide DDT, but also less well-known substances such as Kepone.³⁰ Little did the agency realize at the time that its bans also created a serious problem: stored in massive amounts all over the United States, on farms, at town shops, and within the premises of chemical businesses, DDT, Aldrin, Dieldrin, and other synthetic chemicals like them were no longer legal. The EPA had, technically speaking, turned a large number of chemicals into hazardous waste.

New environmental legislation continued to target hazardous substances after it had taken them off the market. In addition to tighter regulations on the use of chemicals, EPA developed a stricter regime concerning the disposal of what since 1976 it called hazardous waste. After a period of federal neglect concerning solid waste regulation

²⁵ Ann-Kristin Bergquist, "Business and Sustainability: New Business History Perspectives" (Harvard Business School Working Paper No. 18-034, Boston, 2017), 15; Simone M. Müller, "Corporate Behavior and Ecological Disaster: Dow Chemical and the Great Lakes Mercury Crisis, 1970–1972," *Business History* 60, no. 3 (2018): 399–422.

²⁶ Adam Rome, "'Give Earth a Chance': The Environmental Movement and the Sixties," *Journal of American History* 90, no. 2 (2003): 525–54.

²⁷ Michael E. Kraft and Norman J. Vig, "Environmental Policy over Four Decades: Achievements and New Directions," in *Environmental Policy: New Directions for the Twenty-First Century*, ed. Norman J. Vig (Thousand Oaks, CA, 2013), 13. Nixon's environmentalism did not last long, though. J. B. Flippen, *Nixon and the Environment* (Albuquerque, 2000).

²⁸ Geoffrey Jones, *Profits and Sustainability: A History of Green Entrepreneurship* (Oxford, 2017), 147; H. Lanier Hickman, *American Alchemy: The History of Solid Waste Management in the United States* (Santa Barbara, CA, 2003), 50–56.

²⁹ Dennis Williams, "The Guardian: EPA's Formative Years, 1970–1973," Sept. 1993, EPA 202-K-93-002, EPA Archives, Washington D.C.

³⁰ EPA, "DDT Ban Takes Effect," news release, 31 Dec. 1972; Davis, *Banned*.

following World War II, waste management gained currency in the 1960s.³¹ The Solid Waste Disposal Act (1965), the Resources Recovery Act of 1970, and the Clean Air Act (1970) thoroughly changed waste disposal.³² To ensure the proper management of hazardous waste, Congress passed the Resource Conservation and Recovery Act (RCRA) in 1976. RCRA for the first time formally defined hazardous waste as distinct from solid waste. The act established standards for the safe treatment, storage, and disposal of hazardous waste alongside an elaborate tracking system designed to track the whereabouts of toxic substances from “cradle to grave.” It mandated state or regional waste-management plans and established standards for sanitary landfills as well as guidelines for the upgrading of open dumps.³³

For U.S. companies, RCRA changed their treatment of hazardous waste fundamentally. Now, any facility involved in the “generation, storage, treatment, disposal, or transport” of hazardous wastes had to prepare a manifest for record-keeping and reporting purposes. Moreover, companies were required to obtain an operating permit from EPA or an authorized state agency.³⁴ Prior to RCRA, any producer of hazardous waste was able to pass off the waste either to small trucking companies or to chemical brokers such as the Colbert brothers. Both options would take the hazardous materials off the producer’s hands for a small fee—together with the liability for the material. The trucking companies would often dispose of the materials “wherever they thought they could get away with it – city sewers, farms, fields, roadsides.”³⁵ Shortly after RCRA’s main provisions took effect in 1980, simply dumping hazardous material was no longer a cheap and easy option. In addition, the number of landfills declined by almost 50 percent relative to 1976.³⁶ Violations of RCRA regulations could mean criminal and civil penalties up to \$25,000 a day.³⁷ New legislation had created serious pressure for businesses dealing with hazardous substances.

³¹ Garrick E. Louis, “A Historical Context of Municipal Solid Waste Management in the United States,” *Waste Management & Research* 22, no. 4 (2004): 316. The history of waste management is similar in the United Kingdom and West Germany; see Raymond G. Stokes, Roman Köster, and Stephen Sambrook, *The Business of Waste: Great Britain and Germany, 1945 to the Present* (Cambridge, UK, 2011).

³² Jones, *Profits and Sustainability*, 147; Hickman, *American Alchemy*, 50–56.

³³ EPA, *EPA’s Program to Control Exports of Hazardous Wastes: Report of Audit* (Washington, DC, 1988), 8; Louis, “Historical Context,” 317; Hickman, *American Alchemy*, 70–73.

³⁴ Charles E. Davis and James P. Lester, “Hazardous Waste Politics and the Policy Process,” in *Dimensions of Hazardous Waste Politics and Policy*, ed. Charles E. Davis and James P. Lester (New York, 1988), 2–3.

³⁵ Davis and Lester, “Hazardous Waste Politics,” 2–3.

³⁶ Louis, “Historical Context,” 317.

³⁷ UPI, “New Enforcement System,” 39.

When RCRA's cradle-to-grave monitoring system was about to go into effect, in November 1980, companies rushed to get rid of their toxic material—often illegally. The response of businesses to environmentalism was not necessarily one of regulatory compliance, but one of avoidance.³⁸ Over the course of 1979 and 1980, thousands of tons of hazardous and toxic wastes were “hurriedly dumped into city sewer systems, spilled onto busy interstate highways and abandoned in parking lots in a last-minute rush to dispose of the chemicals.”³⁹ All over the country, officials found illegal dumps, such as two in Oakland County, Michigan, that contained thousands of drums of hazardous wastes.⁴⁰ Similarly, state officials ordered the shutdown of twenty-six public water sources because of chemical contamination in Massachusetts alone.⁴¹ While the idea behind RCRA and the cradle-to-grave system was “to channel all of the 40 million tons of dangerous chemical wastes produced in [the United States] annually into approved treatment and storage,” its short-term effect was a dramatic increase in the improper and illegal disposal that the law had been designed to halt in the first place.⁴² Ironically, U.S. environmental legislation had aggravated the problem of hazardous chemicals. At the same time it banned their use, EPA also limited economical options for their safe disposal. This was where Charles and Jack Colbert saw their business opportunity: trading what they called “surplus chemicals.”

The Business World of the Colbert Brothers

In November 1973, Charles and Jack Colbert launched their small-scale “surplus chemical” business in Mount Vernon, New York, an inner-city suburb of New York City situated slightly north of the New York Botanical Garden and the Bronx Zoo. A short drive across the George Washington Bridge is New Jersey, where they had most of their warehouses; several more were located in New York, Delaware, Pennsylvania, and Ohio. From Mount Vernon, the brothers ran a network of essentially two small multinational retailing companies, Signo Trading International and SCI Equipment and Technology, that traded in all sorts of things, ranging from computers and word processors to slightly tainted toothpastes. Many of their products had some

³⁸ Andrew J. Hoffman, *From Heresy to Dogma: An Institutional History of Corporate Environmentalism* (San Francisco, 2007).

³⁹ Michael Knight, “Dumping Rush Starts as Firms Race Deadline,” *Democrat and Chronicle*, 16 Nov. 1980, 93.

⁴⁰ UPI, “New Enforcement System.”

⁴¹ Knight, “Dumping Rush Starts,” 93.

⁴² Knight, 93.

sort of defect without being utterly dysfunctional.⁴³ Their primary commodity was chemicals. They took chemicals banned by EPA for sale or classified as hazardous waste in the United States and turned them around to sell them overseas for a profit. Over the years, the two brothers claim to have generated more than \$180 million in sales and traded with industrial customers in more than one hundred countries around the world—primarily in the global South.⁴⁴

American companies, it seems, were happy to sell their industrial wastes and surplus chemicals to Charles and Jack Colbert and rid themselves of the responsibility for this often carcinogenic, flammable, and poisonous material. In particular, golden days arrived for the Colbert brothers in 1980, with RCRA. The brothers' supply of old, banned, and unwanted chemicals seemed to have been endless. They often bought toxic material "at a discount" or in many cases even "got it for free," according to then assistant U.S. attorney James DeVita, who prosecuted the Colbert brothers' case in 1986.⁴⁵ The list of suppliers included state agencies; the federal government, including the Pentagon; and companies such as Ford Motor Company, Exxon, General Motors, DuPont, ICI, Celanese Corporation, Con Edison in New York, and Detroit Edison.⁴⁶ According to Hugh Kaufman, EPA's chief hazardous-waste investigator, with RCRA's cradle-to-grave system on the horizon, "the pressure [was] on the companies . . . to get the stuff off their site and onto somebody else's court before Nov. 19, [1980,] when they ha[d] to accept responsibility for them."⁴⁷ The Colbert brothers, in turn, seemed to care little about whom they bought material from. In their office hung a sign that read: "At SIGNO, we believe in going where the action is, buying from the most competitive outlet."⁴⁸

The product range of the Colbert brothers' supply list varied widely and reads like a who's who of the most hazardous substances at the time. A closer look at one of the brothers' products, Kepone, illustrates more fully the typical biography of a substance that ended up in their warehouses. Kepone was a pesticide, similar in its chemical makeup to DDT, introduced in 1958 by Allied Chemical Corporation. Prior to its cancellation, Kepone was used in the control of the banana root-borer and the tobacco wireworm, and as bait control for ants and cockroaches. Kepone is

⁴³ "Sci-Tech Offers Personal System," *Computerworld*, 17 Aug. 1981; Ralph Blumenthal, "Tainted Tooth Polish Found in Newark Warehouse," *New York Times*, 22 May 1983.

⁴⁴ "Global Dumping Ground," *Frontline*, 5:01–5:22.

⁴⁵ "Global Dumping Ground," 6:30–7:09.

⁴⁶ "Global Dumping Ground," 7:59–9:00.

⁴⁷ Knight, "Dumping Rush Starts."

⁴⁸ Dennis Harper, "Would You Buy Chemicals from This Man?," image of clipping, Flickr, n.d., accessed 20 Oct. 2018, <https://www.flickr.com/photos/dennisharper/4299698298/in/album-72157622994268211/>.

acutely toxic and induces cumulative and delayed toxicity, neurotoxicity, and reproductive impairment in a wide range of species including birds, rodents, and humans.⁴⁹ In the summer of 1975, news broke that 133 workers at the Kepone production site in Hopewell, Virginia, showed severe symptoms of chemical poisoning: tremors, headaches, breathing problems, rapid eye movements. Thirty of them needed to go to the hospital.⁵⁰ On top of these health issues, massive dumping of the chemical into the James River had contaminated the water and poisoned species of fish from the area around Hopewell all the way to Chesapeake Bay.⁵¹ In response, the production site was closed down.⁵² In June 1976, EPA canceled all registered products containing Kepone as of May 1, 1978.⁵³

When the Kepone scandal broke, Allied Chemical officials told the U.S. government that they had shipped overseas all but 500 pounds of the 1.7 million pounds of Kepone manufactured at the Hopewell Life Science plant in Virginia. About 80 percent of it they had sold to a German company, Spiess & Son, for further conversion into an adduct used for control of the Colorado potato beetle, primarily in eastern European countries; the rest they had sold to Cameroon and Jamaica. The remainder that stayed in the United States, they assured the U.S. government, had been distributed to fifty-five companies for use in home ant traps.⁵⁴ Still, in 1981, an EPA official assured the *Philadelphia Inquirer* that “all known quantities of Kepone in dry form supposedly had been shipped by early 1981 to West Germany and entombed in an underground vault.”⁵⁵ In 1983, when EPA investigated one of the Colbert brothers’ warehouses, officials found 7,000 pounds of Kepone.⁵⁶ How exactly Kepone had ended up in one of the brothers’ warehouses is unclear, but its destiny is certain: export abroad.

⁴⁹ Samuel Epstein, “Kepone – Hazard Evaluation,” *Science of the Total Environment* 9, no. 1 (1978): 1.

⁵⁰ Bruce Ebert and George Stukenbroeker, “Kepone Legacy Lives in Workers’ Bodies,” *Daily Press*, 24 July 1985, 6.

⁵¹ Gregory Wilson, interview by Chance Lee, “Uncovering the History of One of Virginia’s first Environmental Disasters,” Virginia Humanities, Richmond: University of Virginia, 2016.

⁵² AP, “Banned Chemicals Discovered,” *News-Journal*, 25 Apr. 1983, 18; Sandra Sugawara, “Virginia’s James River Still Is Choked with Pesticide Contamination,” *Los Angeles Times*, 25 Oct. 1985; Michael R. Reich and Jaquelin K. Spong, “Kepone: A Chemical Disaster in Hopewell, Virginia,” *International Journal of Health Services* 13, no. 2 (1983): 227–46; Wilson interview, “Uncovering the History.”

⁵³ Richard P. Pohanish, “Chlordecone (Kepone),” in *Sittig’s Handbook of Toxic and Hazardous Chemicals and Carcinogens*, ed. Richard P. Pohanish (Oxford, 2012), 603.

⁵⁴ Kenneth Dalecki, “EPA Rated Kepone Tolerance Level Low,” *Progress Index*, 24 Dec. 1975, 1; Pohanish, “Chlordecone (Kepone),” 605.

⁵⁵ AP, “After Fire, Officials Probe Storage of Cancerous Agents,” *Philadelphia Inquirer*, 25 Apr. 1983, 3.

⁵⁶ AP, “Banned Chemicals Discovered,” 18.

Both national and international regulations legalized the brothers' export of hazardous waste as surplus chemicals. At the time, the definition of hazardous waste, let alone its regulation, was an international conundrum. Throughout the 1970s and 1980s, an internationally binding definition of what constituted hazardous waste remained a goal. Although the term "hazardous waste" had already gained scientific popularity in Western discourses around 1970, the United Nations Environment Programme (UNEP) did not come up with a working definition of what constituted hazardous waste until 1985.⁵⁷ Individually, most countries had only a very rough and philosophical understanding of what constituted hazardous waste. Many countries even lacked a legal definition altogether, since hazardous waste was mixed in with solid waste. In the 1970s and 1980s, the vast majority of countries around the world had laxer environmental and waste-management regulations than did the United States, often declaring as nontoxic and safe materials that EPA had banned. It was among these countries that the Colbert brothers looked for buyers of their surplus chemicals. All across the United States in small trade journals, the Colbert brothers ran their advertising campaign for chemicals that "were no longer approved by the EPA."⁵⁸

The export of "surplus chemicals" did not always go as planned. In 1973, the World Health Organization estimated the number of annual pesticide poisonings in what it then called the Third World at a quarter million, of which about 6,700 were fatal.⁵⁹ Workers in the global South, often unaware of what chemicals they were using and how to use them properly, were generally ignorant of the hazards to which they were exposing themselves. In 1971, the U.S.-manufactured pesticide Phosvel killed over a thousand water buffaloes and an unknown number of peasants in Egypt. In 1972, the consumption of grain coated with a mercurial fungicide banned in the United States brought about the deaths of several hundred people in Iraq. In 1976, Malathion, used for control of malaria-carrying mosquitos in Pakistan, poisoned some twenty-five hundred workers and killed five of them.⁶⁰

These repeated instances of chemical poisonings sparked great controversy in the United States. Politicians, investigative journalists, and diverse special interest groups critiqued the unrestricted export of

⁵⁷ Simone M. Müller, "'Cut Holes and Sink 'em': Chemical Weapons Disposal and Cold War History as a History of Risk," *Historical Social Research* 41, no. 1 (2016): 263–84; J. Daven and R. Klein, *Progress in Waste Management Research* (New York, 2008), 95.

⁵⁸ "Global Dumping Ground," *Frontline*; Kesler, "EPA Handling Cleanup of 'Unknowns,'" *The Morning News*, 1 Mar. 1986, 5.

⁵⁹ World Health Organization, *Safe Use of Pesticides* (Geneva, 1973).

⁶⁰ Andrew Waldo, "A Review of US and International Restrictions on Exports of Hazardous Substances," in Ives, *Export of Hazard*, 21; Norris, *Pills, Pesticides and Profits*, 17.

hazardous material.⁶¹ They argued that it would be “bad foreign policy” if the United States were to permit the unrestricted export of seriously defective or dangerous products to unsuspecting buyers abroad. At the time, Charles and Jack Colbert were not the only agents with a keen interest in the global waste economy. In the spring of 1980, American diplomats rang the bell of alarm when they learned that chemical businesses were proposing multimillion-dollar deals to developing countries for secured dumping grounds for their hazardous wastes. Federal officials worried that U.S. toxic waste would “poison U.S. foreign relations along with the environment of developing countries around the globe.”⁶²

In 1978, U.S. policymakers made a first attempt at restricting the international market of hazardous substances. They amended the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Exporters of pesticides in the United States now had to obtain a statement from the foreign buyers in which those buyers acknowledged the registration status of the product—theoretically signing off on buying unregistered or suspended chemicals. Additionally, in 1980, with sections 3002 and 3003 of RCRA, the EPA recognized that “improper management of hazardous waste [could] extend beyond the nation’s boundaries.” RCRA’s waste-export regulations required exporters, among others, to notify EPA four weeks prior to the initial shipment.⁶³ This notification included the filing of a prior informed consent (PIC) form signed by the prospective buyer.⁶⁴ While U.S. export regulations for hazardous material had grown stricter with these two amendments, they only passed on responsibility to the foreign buyers. If the buyer wanted to buy hazardous material, even such that had been suspended or banned in the United States, there was nothing U.S. legislation could or would do to prevent the transaction. Under Republican President Reagan’s free-market ideology, the notion of “informed consent” had become the basis for national and international hazardous export policy.⁶⁵ Generally, “the feeling [was that] once [the hazardous material] ha[d] left [U.S.] borders, it’s someone else’s problem,” explained Jane Bloom, lawyer with the Natural Resource Defense Council.⁶⁶

⁶¹ On hazardous exports more broadly, see Christopher Sellers and Joseph Melling, *Dangerous Trades: Histories of Industrial Hazards across a Globalizing World* (Philadelphia, 2012).

⁶² Christopher McLeod, “Winning Hearts and Minds with Hazardous Wastes,” *Star Tribune*, 20 Aug. 1980, 7.

⁶³ EPA, *EPA’s Program to Control Exports*, 9.

⁶⁴ EPA, 9; Blaise Farina, “A Portrait of World Historical Production and World Historical Waste after 1945,” *Review (Fernand Braudel Center)* 30, no. 3 (2007): 202.

⁶⁵ Scherr, “Hazardous Exports,” 145.

⁶⁶ Jane Bloom cited in Mark Jaffe, “The West’s Latest Export: Unwanted Waste,” *Philadelphia Inquirer*, 6 Mar. 1988, 1-C.

Despite growing national efforts to regulate the trade and disposal in hazardous materials, the Colbert brothers had ample space to maneuver in a heterogeneous world of environmental policies. They knew of the existing definitory ambiguities and scientific vagueness as well as international differences when it came to defining hazardous substances as waste. Additionally, they had a strange ally: the chemical industry. Lacking an international agreement on what hazardous waste was, the international community discussed the existing problem in terms of hazardous chemicals. At the UN, diplomats recognized the importance of assessing the environmental and health impacts of chemicals and of adopting appropriate control measures. In 1976, UNEP launched its International Register of Potentially Toxic Chemicals (IRPTC) to provide more transparency concerning the world's toxic chemicals.⁶⁷ By 1983, IRPTC's list included about 450 of the most dangerous of the 5 million chemicals then known. UNEP's computer-based profile of each chemical included its name, its properties, its uses, its effects on humanity and the environment, and ways to dump its waste safely; the profile also indicated where the chemical was banned or restricted in use.⁶⁸ The chemical industry represented the biggest impediment to IRPTC's success. Tight-lipped, the world's chemical companies were reluctant to provide adequate information for the registry. They feared for their profits. Since most of the dangerous chemicals were "money-making products such as pesticides," they had little interest in publicizing the chemicals' dangers and closing off export markets where they had not yet been banned, stated Jan Huismans, UNEP's director of IRPTC.⁶⁹ At the time, 30 percent of all pesticides exported from the United States were unregistered for use in the United States. About 20 percent of these unregistered exports were pesticides that were suspended after dangers had become apparent.⁷⁰

Trading Surplus Chemicals as a "Business-Society-Symbiosis"

In the export of chemicals to the developing world, the Colberts were different from two other important players—that is, big chemical corporations and actors in the political development sector such as the United States Agency for International Development (USAID). In contrast to

⁶⁷ George P. Smith, "The United Nations and the Environment: Sometimes a Great Notion?," *Texas International Law Journal* 19 (1984): 348–49.

⁶⁸ Tom Heneghan, "Agency Battles Worldwide Ignorance on Toxic Waste," *Los Angeles Times*, 10 July 1983, 4.

⁶⁹ Heneghan, 4.

⁷⁰ US General Accounting Office, *Better Regulation of Pesticide Exports and Pesticide Residues in Imported Foods Is Essential* (Washington, DC, 1979).

them, the Colbert brothers neither attempted to initiate a green revolution in the global South, nor to open up the developing world as a new market for their expanding business.⁷¹ The brothers' logic for exporting suspended, hazardous chemicals abroad had a twist of its own. In 1990, when the two brothers were already in state prison, TV producer Lowell Bergman took an interest in the global waste economy. For the PBS program *Frontline*, he produced a special report titled "Global Dumping Ground." Charles and Jack Colbert featured prominently and took the opportunity to explain and justify their business philosophy and conduct. In an interview with Bergman, the two brothers explained their business rationale with a symbiotic twist to the American public, probably thankful for a platform that the American judicial system had not granted them. From prison, they could justify their deeds.

In their own rationale, the two brothers were "not recyclers," let alone waste traders, but "pioneers" of the "surplus chemical business." They were buying and selling not waste, but "good products."⁷² What businesses such as DuPont, Ford Motor Company, Exxon, and General Motors or even the Pentagon considered waste, Charles and Jack Colbert considered a resource. They based their business on the logic of a broad meaning of recycling—that is, people's appropriation of "old" things for reuse—and misappropriated it to fit their purposes.⁷³ In an earlier interview, in 1987, the brothers had emphasized that the containers and barrels in their warehouses were "not toxic wastes," but "products used in a business."⁷⁴ Moreover, in the Colbert brothers' eyes, they were selling "virgin material"—chemicals that, instead of being disposed of in the United States, were "used" for the first time. During the interview Jack Colbert corrects his brother when Charles speaks of chemicals being "re-used a second time"—"they were not re-used, they were used," says Jack. Jack's logic is simple: if the chemicals had "never been used the first time," they were "virgin material." "And why," Jack Colbert asks Bergman, should one "bury a drum of good product?"⁷⁵

Moreover, why bury a drum of good product if someone was willing to buy it? Much like the U.S. export laws for hazardous substances, FIFRA and RCRA, the Colbert brothers passed on responsibility to the foreign buyer. Charles and Jack Colbert argued that if the importing nation classified U.S. hazardous-waste material not as waste, but as a resource, they

⁷¹ Weir and Schapiro, *Circle of Poison*, 32.

⁷² "Global Dumping Ground," *Frontline*, 5:57–7:08.

⁷³ On the meaning of recycling, see Ruth Oldenziel and Heike Weber, "Introduction: Reconsidering Recycling," *Contemporary European History* 22, no. 3 (2013): 347–70.

⁷⁴ James Feron, "Mt. Vernon Toxic Cleanup: A Neighborhood Disrupted," *New York Times*, 18 Jan. 1987; *State v. Colbert*, 245 N.J. Super. 53 (1990).

⁷⁵ "Global Dumping Ground," *Frontline*, 5:57–7:08.

obviously had a reason for it. Moreover, asked Jack Colbert, why should one “come out . . . and say that . . . the EPA [knew] better than 165 other countries in the world”?⁷⁶ Without directly saying so, Jack Colbert was adding a strange twist to something that could almost count as postcolonial rhetoric. At the time, he was not the only one with this kind of mindset. Throughout the 1980s, many approaches to banning the export of hazardous substances failed in the face of the argument that such a policy would infringe upon another nation’s sovereignty.⁷⁷ When interviewed in 1980 about his attempt, and failure, to set up a hazardous-waste disposal site in Sierra Leone, James Wolf phrased Colbert’s argument much more pointedly and from an almost postcolonial perspective: the United States was “a little paternalistic in telling the Africans what they can and can’t do [with hazardous waste].”⁷⁸

Buying chemical waste from U.S. agents and selling it as virgin chemical product to industrial customers overseas was a business scheme that the Colbert brothers justified as “symbiotic for both [them] and the society.” On the one hand, they had “found a way to be competitive,” and on the other hand, they were “helping solve a problem,” as Charles Colbert explained to Bergman. The problem Charles Colbert referred to was the disposal of hazardous waste. Since the Love Canal tragedy shook the United States in 1978, waste siting had become a highly controversial issue. Conflicts raged over where (in which communities—rich or poor, white, Native American, or African American) and how (in landfills or incinerators) to dispose of the waste.⁷⁹ Communities of all classes and ethnicities protested the openings of new waste sites, wanting them located “not in their backyards.”⁸⁰

The Colbert brothers offered a pragmatic solution to the issue: “Instead of chemicals going into the ground and costing a lot of money for disposal they were being reused a second time.”⁸¹ Viewed in a large-scale model of global redistribution of “surplus chemicals,” the Colbert’s business was not only saving money for disposal, they argued, but

⁷⁶ “Global Dumping Ground.”

⁷⁷ Scherr, “Hazardous Exports,” 145.

⁷⁸ McLeod, “Winning Hearts,” 7.

⁷⁹ Robert Futrell, “Politics of Space and the Political Economy of Toxic Waste,” *International Journal of Politics, Culture, and Society* 13, no. 3 (2000): 447; Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder, 1994); David N. Pellow, *Garbage Wars: The Struggle for Environmental Justice in Chicago* (Cambridge, MA, 2004); Barry George Rabe, *Beyond NIMBY: Hazardous Waste Siting in Canada and the United States* (Washington, DC, 1994); Eileen McGurtry, *Transforming Environmentalism: Warren County, PCBs, and the Origins of Environmental Justice* (New Brunswick, NJ, 2009).

⁸⁰ Louis Blumberg and Robert Gottlieb, *War on Waste: Can America Win Its Battle with Garbage?* (Washington, DC, 1989).

⁸¹ “Global Dumping Ground,” *Frontline*, 5:45–6:01.

their trade also helped avert the worldwide overproduction of new chemicals. As Jack Colbert said to the PBS producer, “Let me ask you a question, OK. OK, now you have 2,000 tons of pesticides that’s been produced in America. OK. Still on sale in the rest of the world. Now what you want it to do? Do you want it to be buried in America? Or do you want it to be sold in a Third World country, so that 2,000 tons of that product is produced less in the world? What do you prefer?”⁸²

The Colberts’ idea of redistributing industrial waste was neither their own, nor—in theory—far from the policy of EPA at the time. EPA officials similarly followed the premise that “the best way to minimize the hazards of the toxic chemical wastes is to reduce the amount created.”⁸³ With RCRA, programs relating to the “reduction of the amount of solid wastes and unsalvageable waste materials by recycle, reuse, and salvage” became increasingly important. Starting in the late 1970s, EPA supported programs and businesses of “waste exchange,” such as the Midwest Industrial Waste Exchange, which had started as a local waste exchanger in St. Louis in 1975 and was the first waste exchange in the United States.⁸⁴ The basic idea was that one industry’s waste could be another industry’s bargain and that one company could put another company’s hazardous waste to commercial use.⁸⁵

Promoting this kind of recycling, EPA’s understanding of “waste” was not very different from that of the Colberts. Both claimed that “what was trash from one viewpoint, [was] clearly useful from another.”⁸⁶ In a 1980 information booklet on waste exchange, EPA bemoaned how for years, “significant quantities of waste materials” had not been recycled, reused, or salvaged. Rather, their disposal had been “haphazard, and for the most part, unregulated,” leading to the contamination of the environment. The exchange in waste materials, in turn, “offer[ed] an attractive method of waste reduction” that would not only protect the environment but also result in “often neglected savings.”⁸⁷ A 1976 study showed that the United States had about 6 million metric tons of industrial waste with a potential for exchange and reuse estimated at about \$300 million annually.⁸⁸

⁸² “Global Dumping Ground,” 0:20–0:34.

⁸³ EPA official cited in Tim Detjen and Jim Adams, “Theory behind Disposal Method: What One Company Throws Away May Be of Benefit to Another,” *Courier-Journal*, 4 Dec. 1979, 3.

⁸⁴ UPI, “Business Today,” *Seymour Daily Tribune*, 28 July 1980; Detjen and Adams, “Theory behind Disposal Method.”

⁸⁵ AP, “Minnesota Companies Join Waste Exchange,” *St. Cloud Times*, 3 Nov. 1980; Such a cult of recycling was much more vocal in socialist countries, such as Hungary. Zsuzsa Gille, *From the Cult of Waste to the Trash Heap of History* (Bloomington, IN, 2007).

⁸⁶ EPA, *Waste Exchanges: Background Information* (Washington, DC, 1980), 1–8.

⁸⁷ EPA, 1.

⁸⁸ EPA; John Fried, “Where One Firm’s Waste Junk Becomes Another Firm’s Gold,” *Philadelphia Inquirer*, 28 July 1992, 46.

As of November 19, 1980, when RCRA's cradle-to-grave system was about to go into effect, industries were also becoming more hazardous-waste conscious, finding the idea of hazardous waste exchange increasingly attractive. Stricter regulations made dumping almost as expensive as recycling. Selling industrial byproducts openly on the market or through a publicly organized waste-exchange network came with a catch for the industries, however. They were reluctant to pass on more information to the government than necessary. On the one hand, businesses feared that special interest groups might pressure the government to change liability rules and that they would become responsible for hazardous-waste disposal practices that were now legal. On the other hand, industries were afraid to give away trade secrets to competitors. Any time they would tell what and how much they were discarding, a competitor would know what was going on in a plant.⁸⁹ This dilemma created the perfect niche for the business idea of the Colbert brothers.

How the Chemicals Caught Up to the Colberts

Hidden behind the Colberts' pompous and falsely emancipatory rhetoric was the brothers' assumption that they would get away with shady business conduct coated in "informed consent"—simply because they were trading with businesses in the global South. They presumed that their customers in the developing world would neither sue them on health or environmental grounds nor complain if the product they received was not up to standard. While this worked for years, they were wrong, finally, in the case of Zimbabwe.

In 1983, Charles and Jack Colbert bought several hundred drums of "garbage" from the Ohio company Alchem-Tron. They paid 60 cents a gallon. They then turned around and sold Alchem-Tron's garbage—238 drums supposedly containing perchlorethylene and trichloroethylene—to the Zimbabwean company Chemplex Marketing Corp., for \$2.60 per gallon.⁹⁰ Apart from the material being U.S. hazardous waste, there were two additional problems with shipping it to Zimbabwe. First, the material was not exactly what the label said it was.⁹¹ Second, the Zimbabwean buyer paid the Colbert brothers with money received from USAID.

The Colbert brothers' conduct of business was always on the verge of illegality—not necessarily because of the potential environmental and health effects of their products, but because of the chemical properties

⁸⁹ Betsy Robertson, "One Industry's Waste Can Be Another's Bargain," *Tallahassee Democrat*, 7 Dec. 1980, 23–24.

⁹⁰ "Global Dumping Ground," *Frontline*; Hudson, "A Federal Judge."

⁹¹ National Enforcement Investigation Center (NEIC), *Summary of Criminal Prosecutions Resulting from Environmental Investigations* (Denver, CO, 1989), 39.

of the products. The brothers had no engineering or waste-management background—Charles was a law school graduate—and they also seemed to lack, or not care about, the technical skills for properly storing and transporting the material they traded. Rather, media portrayed them as “chemical scavengers” who simply stored the materials, “sometimes mixing dangerous chemicals with one another to such an extent that the stored products became literally time bombs in populated residential and commercial neighborhoods.”⁹² This indifference to chemical properties became apparent in 1983, when a fire broke out in a Newark, New Jersey, warehouse where the Colbert brothers had been storing materials. There, EPA found “at least 10,000 leaking containers of carcinogenic, flammable, and poisonous chemicals.” The chemicals included methyl ethyl ketone, isopropyl alcohol, benzyne, cyanide, and petroleum products.⁹³ That same year, the Mount Vernon Fire Department investigated two of the Colberts’ warehouses. They identified a series of violations ranging from improper storage to zoning violations related to toxic emissions.⁹⁴ Finally, when EPA cleared another of the Colbert brothers’ warehouses in Mount Vernon, after their conviction in 1986, the agency drew up plans for the evacuation of up to five thousand people within a radius of roughly four blocks from the warehouse. Officials were concerned about the removal not only of deteriorating drums and boxes, but of such shock-sensitive and explosive substances as ether, nitro cellulose, and picric acid.⁹⁵ Preparing for the \$1 million cleanup, EPA put area hospitals on alert and told residents through pamphlets distributed house-to-house that air raid sirens would signal immediate evacuation in the event of an unexpected problem. Residents would then be bused farther away from the site.⁹⁶ In the end, a large-scale evacuation was not necessary even though EPA officers found fifty-four drums of ether at the warehouse. Luckily for the residents of the area, the Colberts had added water to the ether, which slowed the oxidizing process and made it less shock-sensitive and explosive. Rich Cahill, an EPA spokesperson, mused that “it would be hard to say they were adding water to make it safer. . . . The likelihood is they were simply watering it down, but their greed has made our job easier.”

⁹² Tom Hester, “2 Brothers Indicted for Keeping Deadly Chemicals in Somerville,” *Central New Jersey Home News*, 15 Aug. 1986, 6.

⁹³ UPI, “Stored Chemicals Called Hazardous,” *New York Times*, 19 July 1983; State, DEP v. Signo Trading Intern., 235 N.J. Super. 321 (1989).

⁹⁴ Edward Hudson, “Chemical Concerns Held Still Violating,” *New York Times*, 19 June 1983. In the 1990s, the warehouse owner sued Signo Trading International for the cleanup costs. *State v. Signo Trading Intern., Inc.*, 130 N.J. 51 (1992).

⁹⁵ James Feron, “Toxic Clean-Up Could Force Evacuation,” *New York Times*, 7 Jan. 1987; Joyce Dopkeen, “Chemical Force Removals in Mt. Vernon,” *New York Times*, 10 Jan. 1987.

⁹⁶ Feron, “Toxic Clean-Up.”

Investigations showed that Jack and Charles Colbert had always been mixing or watering down chemicals. While that practice worked for over a decade, it provided their downfall in the case of Zimbabwe.⁹⁷ When Chemplex learned that what it had ordered from the Colberts was only a “cheap recycled chemical mixture that could not be used,” and contained only 1 percent of the ordered chemicals, they reported the matter to the U.S. agency that had financed the deal.⁹⁸ What the Colbert brothers did not know was that the company in Zimbabwe had received the American dollars to pay for the chemicals from a U.S. foreign aid program. When the drums arrived in Zimbabwe, there was one emblem on the drums that warned of hazardous chemicals and another one that said USAID.⁹⁹

This financing scheme was problematic not only because it was U.S. taxpayer money, but also because USAID had a difficult history with hazardous exports. For years, the agency had financed massive overseas shipments of banned U.S. pesticides.¹⁰⁰ In 1975, a group of environmental advocacy groups led by the Environmental Defense Fund had sued USAID on environmental grounds targeting its pesticide program. The lawsuit alleged that the aid agency had failed to undertake environmental impact statements as required by the new environmental statutes of the National Environmental Policy Act, NEPA. While USAID argued that U.S. environmental legislation did not apply to extraterritorial activities, it still agreed in an out-of-court settlement to establish environmental impact procedures for all its projects from then on.¹⁰¹ The agency’s new environmental regulations also concerned the Colbert brothers’ 1983 deal with Zimbabwe. Soon the FBI was also investigating the trade.¹⁰² Both USAID and the FBI found that not only were the chemicals sent to Zimbabwe of no use for Chemplex, but also that, if used, the Colbert brothers’ product “could have seriously endangered the citizens of Zimbabwe.”¹⁰³

In June 1986, the U.S. District Court for the Southern District of New York convicted Charles and Jack Colbert of fraudulently shipping hazardous and impure chemicals to Chemplex in Zimbabwe.¹⁰⁴ While the court ordered the two brothers to make financial reparation to the

⁹⁷ NEIC, *Summary of Criminal Prosecutions*, 39.

⁹⁸ AP, “Court Upholds Conviction,” 4.

⁹⁹ “Global Dumping Ground,” *Frontline*.

¹⁰⁰ Weir and Schapiro, *Circle of Poison*, 51.

¹⁰¹ C. A. Corson, *Corridors of Power: The Politics of Environmental Aid to Madagascar* (New Haven, 2016), 94; Stephen J. Macekura, *Of Limits and Growth: The Rise of Global Sustainable Development in the Twentieth Century* (Cambridge, UK, 2015), 185.

¹⁰² NEIC, *Summary of Criminal Prosecutions*, 39.

¹⁰³ John Matelsky, USAID spokesperson, cited in Jaffe, “The West’s Latest Export,” 2-C.

¹⁰⁴ Hudson, “A Federal Judge.”

victims, it said nothing about an environmental cleanup or return of the impure chemicals. The 1,500 gallons of toxic waste remained in Zimbabwe. Supposedly, it was dumped into the slime dam of a state-owned phosphate mine.¹⁰⁵

Conclusion

From the example of the Colbert brothers, we can draw many conclusions regarding the link between nationally framed environmental policies and transnational externalization processes; laws and foreign-trade principles facilitating international hazardous trades; and ideological justification models for the practice of “dumping” hazardous material on developing countries. The story provides one of the rare cases where the conviction of two hazardous-waste traders and the convicts’ flirtation with the media open up vistas into the gray-market structures of the global waste economy that link the macro- and microlevels of analysis. This article shows how foreign trade came to intricately link the environments and environmental policies of industrial and developing nations in the 1970s and 1980s and how small-scale retailers operated legally in a heterogeneous world of differing environmental policies dominated by free-market ideology.

When the Colbert brothers entered what they called the “surplus chemical” business in the 1970s, they did so at a pivotal moment in environmental and business history. Rachel Carson’s *Silent Spring*, the burning of the Cuyahoga River, and the Santa Barbara oil spill, among other environmental writings and pollution stories large and small, had spurred a wave of environmentalism in the country.¹⁰⁶ Throughout the early 1970s, the U.S. government responded with bipartisan support transforming the United States into one of the greenest nations at the time, at least on paper. Under pressure from both the government and the public, American companies opened up to an understanding of corporate environmentalism. Not all, but a fair number of U.S. companies started producing green products and using alternative energy. They generally became more sustainable through resource conservation and recycling.¹⁰⁷

American environmentalism remained contained within U.S. borders, however, and did not affect foreign trade. The conviction of Charles and Jack Colbert in 1986 made apparent the hidden externalities of America’s green turn. When over the course of the 1970s, EPA banned or suspended a series of toxic chemicals from the U.S. market, industry

¹⁰⁵ Hudson.

¹⁰⁶ Adam Rome, *The Genius of Earth Day: How a 1970 Teach-In Unexpectedly Made the First Green Generation* (New York, 2013).

¹⁰⁷ Hoffman, *From Heresy to Dogma*; Jones, *Profits and Sustainability*.

and retailers turned around to sell them abroad. When in 1980 RCRA affected U.S. businesses' hazardous-waste disposal, the businesses' strategy was not only one of regulatory compliance through upscaling their waste-disposal facilities, but also one of regulatory avoidance through waste export. Businesses externalized their costs of environmentalism, and the Colbert brothers facilitated the channels for such externalization through their chemical retail business trading unwanted material with countries in the global South.

Economists have long debated the existence of a pollution haven effect.¹⁰⁸ Trade and environmental policy debates seem to take it as a given that regulatory stringency in developed countries shifts polluting industries to the developing world. Empirical economic studies, in turn, have found it difficult to measure said effect quantitatively.¹⁰⁹ While the example of the Colbert brothers is only anecdotal evidence about the global North's dumping on the global South, we miss three important points by setting the two brothers' story solely in the context of the effects and (non)existence of externalization processes in a liberal market economy.

First, it should strike us as important that the Colbert brothers' foreign-trade actions were legal. At the time, neither U.S. nor international environmental or foreign-trade legislation prevented the brothers from exporting their hazardous chemicals as long as the buyer consented to it. In the end, both brothers were convicted for fraud. They were not sentenced for the environmental or health consequences that might have occurred—or did occur—when exporting hazardous material to places, such as Zimbabwe, that did not necessarily have the technology, equipment, or working standards to properly deal with it.

Second, we should note that territorially framed environmental policies, weak foreign-trade regulations for hazardous substances, and a lack of an internationally binding definitory framework lay at the heart of such an unequal trading system. On the one hand, this illustrates the challenge to find a common ground where ideas of national sovereignty, market liberalism, and environmental protection could be equally important. On the other hand, it invites us to reflect on the role and importance of borders and systemic subdivisions in part and parcel versus a planetary whole.¹¹⁰ Environmental historians have long

¹⁰⁸ Charles Pearson, "Environmental Standards, Industrial Relocation, and Pollution Havens," in Pearson, *Multinational Corporations*, 113–28.

¹⁰⁹ For an overview, see Arik Levinson and Scott Taylor, "Unmasking the Pollution Haven Effect," *International Economic Review* 49, no. 1 (2008): 223–54.

¹¹⁰ For instance, Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London and New York, 2015).

shown how permeable borders are when you live downstream of a polluting source.¹¹¹

And finally, we need to pay attention to the narratives that substantiate, co-create, and justify both the above structures and the Colbert brothers' trading transactions. During an era of free-market ideology, prior informed consent (PIC) had become the dominant principle in international trade, shifting responsibility as well as liability to the foreign buyer. At the time, the notion of prior informed consent easily accommodated the great varieties of environmental standards, problems, and policies that existed throughout the world as well as a political reluctance to enforce one international standard. The PIC principle, however, not only passed on responsibility to the foreign buyers, but also incorporated a hidden assumption that there may be bodies somewhere else on this planet that could be less or differently affected by the materials' hazards. Taken together, the lack of strict regulations on hazardous foreign exports, the national territoriality of environmentalism, and the business philosophy of Charles and Jack Colbert (as well as many other traders like them) co-created a world of environmental inequality as well as a world in which environmental policy difference substantiated economic growth.

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SIMONE M. MÜLLER is project director and principal investigator of the DFG Emmy Noether Research Group “Hazardous Travels: Ghost Acres and the Global Waste Economy” at the Rachel Carson Center for Environment and Society, Munich. She works at the intersection of globalization studies, economic and social history, and environmental humanities. Her research interests include the international trade in hazardous-waste material, the intellectual history of economic ecological thinking, green city concepts, and the study of ocean space.

¹¹¹ For instance, Nancy Langston, “Thinking like a Microbe: Borders and Environmental History,” *Canadian Historical Review* 95, no. 4 (2014): 592–603; and Mary Mendoza, “Treacherous Terrain: Racial Exclusion and Environmental Control at the US-Mexico Border,” *Environmental History* 23, no. 1 (2017): 117–26.