

1989

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Recommended Citation

Dodd-McCue, Diane and Martha Reiner. 1989. "Avtex: A Clash of Environmental Business and Defense Interests." E.C.R.S.B. 89-4. Robins School of Business White Paper Series. University of Richmond, Richmond, Virginia.

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AVTEX: A CLASH OF ENVIRONMENTAL
BUSINESS AND DEFENSE INTERESTS

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ABSTRACT

AVTEX: A CLASH OF ENVIRONMENTAL, BUSINESS, AND DEFENSE INTERESTS is based on the continuously unfolding conflict between the only certified US supplier of carbonized rayon for the Department of Defense and NASA with state and federal water and air quality regulators. AVTEX, a privately held and financially strapped corporation, is the biggest water and air polluter in Virginia and one of the worst nationwide. It is also a major employer in Front Royal, VA, a small community nestled in the Shenandoah Valley. Complicating the AVTEX controversy are the \$22.6 million federal bailout in November 1989 and recent charges by environmental regulators of ongoing water and air violations. AVTEX primarily focuses on this continuing case with respect to government and business relationships deemed ethically necessary to protect the environment.

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AVTEX: A CLASH OF ENVIRONMENTAL AND DEFENSE INTERESTS

Last November 3, in response to a variety of water and air pollution and worker safety violations and foreign competition, the chairman of Avtex Fibers Front Royal Inc. closed his company's aging plant - only a day after Virginia's Attorney General filed a \$19.7 million environmental damage suit against the firm. The suit cited 1,968 water pollution violations since 1980. Over 1,300 workers in the small Shenandoah Valley community of 12,000 were laid off, only to be recalled a week later after a successful short-term bailout effort spearheaded by Virginia Senator John Warner.¹

Currently Avtex, the Shenandoah Valley's major employer, is operating at full capacity, producing \$22.6 million of high grade carbonized rayon for the United States Air Force and \$18 million of the fiber for NASA contractor Morton Thiokol for the space shuttle's solid rocket boosters. The government contracts represent twice the amount of rayon yarn needed and would result in a transfer of production process rights to the Air Force in the event that Avtex reneges on the contract. The bailout plan includes a surcharge assessment on rayon fibers sold to purchasers other than the Department of Defense and NASA.² The bailout also stabilizes the unemployment rate in the six-county Shenandoah Valley area at 4.6%, a rate half that predicted for a permanent closing of the Avtex plant.³

In response to its environmental violations, Avtex agreed to pay \$2 million in civil penalties to the city of Front Royal and establish a \$5.75 million trust fund earmarked for bringing the plant up to state air pollution compliance regulations.⁴ In recent

¹ Thomas Campbell and James Gatins, "Clashing interests will shape future of Avtex," The Richmond Times-Dispatch, Nov. 20, 1988, p.1.

² SDI, Daily News Record, Dec. 16, 1988, p.9.

³ Bryan Shull, Industry Development Specialist, Front Royal Chamber of Commerce, Front Royal, VA. Interview May 25, 1989.

⁴ SDI, Daily News Record, Dec. 16, 1988, p.9.

developments, state officials are asking that Avtex be held in contempt of court and fined for 39 water pollution violations it alleges occurred between December 1988 and March 1989.⁵

This account is only an update in the continuing saga of the conflict of environmental, business, and defense interests surrounding Avtex, a conflict spanning a half century. The following discussion presents the Avtex case in an historic perspective, identifies defense industry peculiarities that affect the case, and examines the case with respect to government and business relationships deemed ethically necessary to protect the environment.

A HISTORY OF NON-COMPLIANCE

Avtex's Front Royal plant, established in 1937 by American Viscose Corp., a subsidiary of a British corporation, began operations as Virginia's largest industrial facility and the world's largest rayon plant. It was sold in 1941 to U.S. investment bankers and shareholders as a means of raising over \$100 million for the British armament effort. In 1944, at the request of the U.S. government, the plant expanded to increase its rayon production to 82 million pounds per year; the production increase was earmarked for "high tenacity" fiber used primarily for heavy tires used by military vehicles and planes.⁶

During the past four decades the facility's major product, rayon fiber, has remained constant although ownership, public opinion and government legislation and regulation has changed. Since WWII the plant has been owned by American Viscose (1941-1963), FMC Corporation (1963-1976), and the current owners Avtex, a privately held corporation that purchased the plant in 1976 through a \$2.5 million leveraged buyout. In the area of

⁵ M. Martz, "Hold Avtex in contempt, water board asks court," The Richmond News Leader, May 4, 1989, p.1.

⁶ "Front Royal's Avtex plant has faced nearly a half-century of problems," The Richmond Times-Dispatch, Nov. 20, 1988, p.7.

public opinion, patriotic purposes have periodically been overshadowed by concern for water and air pollution and worker safety. Establishment of state and federal legislation and regulation has followed suit.⁷

The end of World War II brought a shift in public opinion from patriotic concerns to environmental concerns about water discharges of sulfuric acid and fish kills in the South Fork of the Shenandoah River. In response, the newly established State Water Control Board ordered the plant to install a \$150,000 waste water treatment plant on 438-acre plant site in what was a landmark case. The following year the plant's management boasted that "serious (water) contamination no longer exists." However, U.S. Fish and Wildlife Service and Water Board officials questioned this claim.⁸

During the 1950's and 1960's, management's attention to environmental issues was overshadowed by concern for plant reconstruction following a fire which left \$1 million in damages to the facility. However, pollution of the South Fork resulted in 500,000 dead fish along 35 miles of river and netted the plant the water board's largest fine to date, \$154,770, in 1959. In partial response to this fine, filters to remove zinc from discharged water were installed and additional equipment was added to remove sludge.⁹

The 1970's introduced other pollution regulators to the scene. The Environmental Protection Agency (EPA) issued the state's pollution discharge permits, which allow industrial plants to discharge into rivers and streams under certain limits and conditions. After 1977, regulation under the U.S. Clean Water Act found Avtex in violation of water standards, past and present.

Avtex's water pollution problems began to escalate in the early 1980's. Carbon disulfide, a toxic component of viscose waste, surfaced in private subdivision wells

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

across the river from the plant. Avtex's site, identified as "acutely toxic" by the Water Board, joined the EPA's list of Superfund sites amid protests by previous owner FMC, who contends the U.S. government should share in cleanup costs because the plant had been in operational control of the WWII War Production Board.¹⁰ However, the recent suit filed by Virginia's Attorney General May Sue Terry is perhaps the most serious and potentially damaging to the plant's continued survival.¹¹

Today many water quality experts contend that Avtex is the major polluter of the Chesapeake Bay.¹² The chief sources of river and ground water pollution are three waste water discharge points, or outfalls, along the river bank and 23 large, unlined waste water holding and waste disposal ponds containing sulfur, viscose, and fly ash pollutants. Complicating the problem are old, corroded, and leaky lines, often over 50 years old, and overflows from the plant's sewage and water treatment facilities, the result of fiber-clogged pipes.¹³ EPA officials report that in 1987 Avtex channeled over 80 million pounds of toxic chemicals into the Shenandoah River's South Fork.¹⁴

In a recent interview Bill Kregloe, Regulatory Services Engineer with the state water board, acknowledged that Avtex's current water pollution violations include acidity and discharge temperature deviations, suspended solids and process materials, and very high concentrations of sulfates and metals, particularly zinc.¹⁵ Relative to ecological damage, the suspended pollutants smother marine life by blocking fish gills while the

¹⁰ Ibid.

¹¹ William Ruberry and Thomas Campbell, "Toxic releases far surpass EPA estimate," The Richmond Times-Dispatch, Apr. 13, 1989, p.1.

¹² Bill Klegloe, Regulatory Services Engineer, Virginia Water Control Board, Bridgewater, VA. Interview May 18, 1989.

¹³ Campbell and Gatins, 1988.

¹⁴ Va. Dept. of Waste Management and State Water Control Board, 1989.

¹⁵ Klegloe, 1989.

metal discharges interfere with organic enzyme reactions and can prove lethal. Sulfates, although not noxious, are included in the EPA's list of pollutants of concern because of the high levels of discharges.

However, water pollution is only one area of environmental concern. Avtex is also the state's leading air polluter, releasing approximately 51 million pounds of toxics into the air during 1987. Additionally, over 3 million pounds of toxics were disposed of improperly onto land. Virginia's Water Control Board Director noted that "No. 1 on the hit parade every time is Avtex... Something like 30 percent of all the (toxic chemicals) in Virginia going into the water is from Avtex. Almost 40 percent of the (toxic) air pollution and 50 percent of what going into (waste lagoons and landfills) is from Avtex".¹⁶

Although Avtex's history of environmental violations implies a management unconcerned with regulatory forces, its responses to two secondary, non-environmental issues emphasize this malaise: responses to worker safety violations and previous federal bailout efforts. Since 1980 the State's Department of Labor and Industry investigated numerous complaints of employee lead poisoning, excessive dust, coal dust pollution, and excess toxic chemical vapors. Three employee were killed and another blinded in plant accidents. During a three month period in 1987 alone plant inspections revealed 1,921 worker safety standards violations and 92 worker health violations.¹⁷

In terms of corporate finances, the picture is less clear: as a privately held corporation, Avtex's records are not open to public scrutiny and Chairman John Gregg has declined interviews. However, the current federal bailout is the second time Avtex

¹⁶ "Largest toxic chemical dischargers in Virginia." Source: Virginia Department of Waste Management and State Water Control Board, in The Richmond Times-Dispatch, Apr. 13, 1989, p.1.

¹⁷ James Gatins, "Accidents claimed 3 workers in a year, The Richmond Times-Dispatch, Nov. 20, 1988, p.9.

has received taxpayer support. In 1979 the Farmers Home Administration guaranteed 90% of a \$20 million loan made to Avtec by New England Life Insurance Co. Although agency officials cannot verify the status of repayment, they acknowledge that the repayment deadline has been extended several times.¹⁸

DEFENSE INDUSTRY PECULIARITIES

The Avtex plant's links to the defense industry span its fifty year existence. The U.S. defense establishment of the 1980's is by far the largest and most complex business organization in the world. However, relative to the Avtex case, three distinctions arise between the defense industry and the traditional business environment.

First, the defense marketplace is not viewed as a free enterprise system because most defense producers depend heavily upon defense contracts and produce special order, not easily substituted, goods. On large projects the federal government supplies a significant part of working capital and investment and the possibility of cancellation is reduced.¹⁹ Because Avtex is a privately held corporation, only minimal financial information is available.

Second, relationships between buyers and sellers reflect a high degree of reciprocal dependency. Avtex's carbonized rayon is used to produce rocket nozzles and other space shuttle parts, the first and second stages of the Peacekeeper missile, the Trident 2 missile, and other military rocket systems, not less customized industrial or retail products. As the only U.S. rayon fiber producer qualified by the military, Avtex's brief and temporary closing created a space and defense materials supplies crisis similar to the explosion-prompted closing of a Nevada ammonium perchlorate plant, which destroyed half

¹⁸ "Front Royal's Avtex Plant has Faced Nearly a Half-Century of Problems," 1988.

¹⁹ J.R. Fox, The Defense Management Challenge. Boston: Harvard Business School Press, 1988.

of the U.S.' capacity for producing solid rocket fuel.²⁰ No other producers of carbonized rayon are certified to sell to the government.

Third, Defense Department installations face more lenient antipollution requirements than private industry, although the armed forces dispose of over 400,000 tons of liquid waste annually, creating extensive pollution problems that critics claim will require billions of dollars and decades of effort to correct.²¹ Unlike private industry, the Defense Department is allowed to establish its own cleanup standards and timeframes and withhold certain information from the public. In terms of contracts, the Defense Department does not withhold contracts, grants, or loans from violators of the Clean Air and Clean Water Acts, although other government agencies (i.e. EPA) do.²² Although Avtex is a defense contractor rather than a component of the Defense Department, its management may share the Defense Department's posture on a self-set environmental protection agenda.

FROM AN ETHICS PERSPECTIVE

In The Wealth of Nations Adam Smith explained that self-interest, guided by the market as if by an invisible hand, would serve society's interests more effectively than altruism would. Smith argued that a sovereign or commonwealth had certain duties to provide what self-interest and the market could not provide: first among these duties was defense. The most industrious and therefore the wealthiest nations were the most likely to be attacked, he contended. Yet self-interest and the market would not motivate individuals to specialize in the art of war because the "wisdom of the state" should

²⁰ Washington Technology, Nov. 30, 1988.

²¹ The Wall Street Journal, Eastern SP Edition, July 22, 1983, p. 191.

²² Chemical Engineering, Aug. 6, 1984, p. 16.

provide for the public defense.²³

At the same time, setting aside the market to contract for defense reduces pressures for self-interest to serve society's broader interests. The Avtex case shows the conflict between the established practice of removing constraints from defense contractors in the public interest and what seems to be a more recently established goal of protecting the environment. What principles in the social contract tradition suggest how to resolve this conflict?

PROTECTING THE ENVIRONMENT

Locke's view of the social contract is a crucial part of the American political tradition and the American view of the legitimacy of private enterprise.²⁴ Property symbolizes rights, according to Locke. Although property initially was a common, individuals acquired property rights by common consent because they transformed nature with their labor. Society recognized individuals' property rights that arose from responsible economic transactions that did not waste the common stock. Individuals joined to form a social contract, in which the natural law in rational individuals' minds was codified in a legal system that imposed some constraints but protected individuals' rights, particularly property rights.²⁵ Because these property rights follow from a responsible transformation of nature, it is not necessary to assume that there is a basic conflict between property rights and environmental preservation in the American legal

²³ Adam Smith, An Inquiry into the Nature and Causes of The Wealth of Nations (1776), Book V, Chapter I, Part I, presents the initial treatise.

²⁴ See, for example, Louis Hartz, The Liberal Tradition in America: An Interpretation of American Political Thought Since the Revolution (New York: Harcourt Brace Jovanovich, 1955), pp. 10-11.

²⁵ John Locke, Second Treatise on Government (1764).

and political tradition, as Blackstone does.²⁶

In contemporary ethics literature, Velasquez distinguishes two arguments for environmental protection legislation based on duties. First, there is a duty to protect the environment with an "ecological ethic," a duty to the environment in and of itself. Second, there is a "human rights" position, a duty to respect the right of every human being to a livable environment. To Blackstone, this is an absolute right, which should override property rights in our legal system.²⁷

However, in practice the American political and legal system often treats the public goal of economic development as more important than the public goal of environmental preservation. In the nineteenth century, a principle of priority for development displaced a principle of priority for natural use in property rights disputes²⁸, reflecting a lack of public concern for waste of natural resources because of the assumption of abundant resources.²⁹ With the recognition that natural resources are not inexhaustible, public support for environmental protection has increased steadily. Growing public concern during the late 1960s through the 1970s lead the federal government to establish an absolute duty to protect the environment. During the past decade, federal environmental policy makers have moved toward a utilitarian ethic that would evaluate measures to preserve a livable environment along with other costs and benefits to society. However, critics of Executive Order No. 12291 (February 17, 1981), which

²⁶ Manuel G. Velasquez, Business Ethics: Concepts and Cases, second edition, (Englewood Cliffs, N.J.: Prentice Hall, 1988), pp. 236-240. Velasquez refers to William T. Blackstone's "Ethics and Ecology," in Philosophy and Environmental Crisis, ed. William T. Blackstone (Athens, GA: University of Georgia Press, 1974).

²⁷ Ibid.

²⁸ Morton J. Horwitz, The Transformation of American Law, 1780-1860 (Cambridge, Mass.: Harvard University Press, ;1977), pp. 32-34.

²⁹ James Williard Hurst, Law and the Conditions of Freedom in the Nineteenth-Century United States (Madison, WI: The University of Wisconsin Press, 1956), p. 99.

specifically requires a cost-benefit analysis of all new environmental regulation³⁰, contend that the benefits of preserving the environment raise unanswerable technical questions. Further, critics argue, the very act of quantifying these decisions as if they were individuals' private transactions in the market undermines the American tradition of having a distinct political arena for collective public decisions.³¹

As Feinberg³² observes, even with absolute duty to protect the environment emphasized, formulation of effective, equitable, and feasible legislation is difficult. Thus, he notes, the Clean Air and Water Standards Acts sought not the "elimination" of pollution but the "prevention of a significant deterioration" of the environment. This implies floating enforcement standards, a function of the accumulation of particular pollution contributions of all polluters to date.

Even with the shift in environmental law from absolute duty to a utilitarian analysis, contemporary environmental public policy relies on the social contract that Garrett Hardin proposed in "The Tragedy of the Commons": "mutual coercion," mutually agreed upon. Because it is not in the individual property owner's interest to refrain from polluting, administrative laws dealing with the problems of preserving the environment surfaced. Administrative law is necessary even though administrative discretion raises the long-recognized problem of "Who shall watch the watchers themselves?" According to Hardin, "corrective feedbacks" should supplement administrative authority.³³

³⁰ Velasquez, Business Ethics, pp. 237-251.

³¹ Steven Kelman, "Cost-Benefit Analysis: An Ethical Critique," Regulation (Jan./Feb. 1981): 33-40.

³² John Feinberg, Harm to Others: The Moral Limits of the Criminal Law (Oxford, U.K.: Oxford University Press, Inc., 1984).

³³ Garrett Hardin, "The Tragedy of the Commons," Science 162 (December 13, 1968): 1243-48.

As seen in responses to the Exxon Valdez pollution incident, public opinion has corrective feedback mechanisms that address the economic actor directly. However, this response may be more viable when the economic actor is a publicly traded company. Shareholder activism, drawing on the clout of institutional investors, may have some limited influence on management. But what feedback mechanisms are there when the polluter is a privately held company? Or a defense contractor?

THE DEFENSE INDUSTRY PERSPECTIVE

Despite Adam Smith's claim about the "wisdom of the state" providing for public defense, contemporary society apparently questions the defense industry's ethical stands. In recent years, public outcry about alleged conflict of interest, fraud, and kickbacks in defense contracting has resulted in investigations and corrective legislation. A 1986 report by the Presidential Commission on Defense Management, headed by Hewlett-Packard cofounder David Packard, condemned defense industry practices.³⁴

Public pressure has also brought attempts at another form of mutual coercion, mutually agreed upon constraints: industry codes of conduct. After issuance of the Packard Commission report, major defense contractors affiliated with the Aerospace Industries Association of America signed the Defense Industry Initiatives on Business Ethics and Conduct. By signing, they agreed to follow a written ethics code, educate employees, set up a confidential reporting system for employees, report violations to government authorities, and be accountable to other members of the industry as well as to the public.³⁵ However, the industry codes only deal with the public outrage that prompted the legislation and do not address public concern for the environment. In

³⁴ See numerous acknowledgements in Fox, The Defense Management Challenge, 1988.

³⁵ "Defense Firms Don White Hats," Electronic News (July 14, 1986): 13; William H. Gregory, "Industry Grapples With Challenges Posed by Contract Compliance," Aviation Week and Space Technology (Feb. 2, 1987): 84-88; William H. Miller, "An End To Defense Scandals?" Industry Week (Sept. 16, 1985): 55-58.

addition, many contractors, including smaller aerospace firms, are highly critical of the Defense Industry Initiatives on Business Ethics and Conduct.³⁶

THE "MORAL MINIMUM"

The "moral minimum" implies a prima-facie obligation to avoid harming others and suggests that, in some situations, failure to prevent injury by another, a sin of omission, is also a sin of commission. According to the Kew Garden Principle,³⁷ if there is actual or pending critical injury, determining who is the responsible party to prevent or mitigate injury is a function of who is aware of the need and who has the capacity to take action. In extreme last resort situations, as a "moral minimum" any party, regardless of the relationship to the source of harm or the injured, is obligated to take action.

In the Avtex case, the corporation, Department of Defense, and various environmental regulators all have a responsibility to curb the continuing harm to the environment and may be accused of having failed in their obligations to the public. Current efforts reflect a renewed interest by environmental regulators and state officials in fulfilling their obligations to the public and the environment. Unfortunately, previous regulatory zealotry has not led to a satisfactory long term solution. Perhaps now is the time for the public to reactivate its interest and support in preventing future environmental injury.

³⁶ "Industry Grapples With Challenges Posed By Contract Compliance," p. 84.

³⁷ John Simon, Charles Powers, and Jon Gunnenmann. The Ethical Investor: Universities and Corporate Responsibility (New Haven, Conn.: Yale University Press, 1972.)