

Cato Institute Policy Analysis No. 200: Taken to the Cleaners: A Case Study of the Overregulation of American Small Business

December 22, 1993

Jonathan H. Adler

Jonathan H. Adler is an environmental policy analyst at the Competitive Enterprise Institute. He contributed the chapter "Clean Fuels, Dirty Air" to *Environmental Politics: Public Costs, Private Rewards* (Praeger, 1992).

Executive Summary

In today's regulatory environment, it is becoming increasingly difficult to maintain a small business; it is even more difficult to start one. The plight of local dry cleaners is indicative of that trend. Opening a new dry-cleaning shop can require filling out and complying with 100 forms and manuals. Environmental and other regulation can increase start-up costs as much as \$138,700 and impose burdensome permitting and reporting requirements. The experience of the dry-cleaning industry with government regulation is indicative of the general concerns faced by today's small business owners and entrepreneurs. Because of the important role of small businesses and entrepreneurship in the creation of jobs and economic opportunity, the present trend should be of great concern to policymakers.

Many of the regulations affecting dry cleaners were promulgated to control the use of perchloroethylene (perc), the dominant dry-cleaning solvent in use today. Regulations cover workplace exposure to perc as well as its potential release to the air. When perc residues are discarded, they must be handled as hazardous wastes. Many of the regulations impose significant costs for minimal benefits.

In addition, dry cleaners must comply with a raft of occupational health and safety regulations, including regulations governing potential exposure to HIV and other blood-borne pathogens. Dry cleaners also face the specter of sudden inspection by regulatory agents. Today many dry cleaners are also finding themselves liable for the multi-million-dollar costs of cleaning up groundwater contamination that they may not have caused. The net effect of many of the regulatory requirements is that more dry cleaners close their doors and fewer are established to take their place.

Introduction

Yong Kyun Pak arrived in the United States from South Korea in 1979, looking for a better life and greater opportunities for his family. For six years he worked two jobs in Southern California and saved his money. Then, in 1985, he purchased his first business, VIP Cleaners in Newport Beach, California.

Since Pak purchased VIP Cleaners, things have not gotten any easier. Today he works 13 or 14 hour days, 6 days a week, and many of his holidays are spent performing maintenance on his machinery. He estimates that VIP handles 1,200 shirts and dry cleans 700 pounds of clothing per week. His wife works alongside him, and his younger children still stop by the store after school to lend a hand. In addition to his family, Pak employs two pressers. "It's not easy," Pak says, but he is committed to working hard so that his four children can attend college and be successful. When his children come home with A's on their report cards, "It makes all the tiredness go away."

Pak works hard, but he worries about the future. In recent years state and federal regulations affecting his business have increased. Last year he had to replace his dry-cleaning machine, and now he rents one that meets the regulatory requirements for \$1,300 per month--over \$15,000 per year. He was unable to sell his old machine because it does not meet the new regulatory requirements. This year he expects to be forced to spend almost \$1,000 on new waste-water treatment equipment. On top of that, he pays fees to the fire department, the municipality, and several other agencies. "Everywhere there is a fee," he says.

To dispose of used solvents and filters, Pak pays a waste disposal company another \$1,200 annually. The waste disposal company is kind enough to help Pak fill out the required regulatory paperwork, but he still must pay an accountant \$1,000 to help him with the remaining paperwork--several dozen forms required by federal, state, and local officials. Pak's English is fairly good, but not good enough to fill out government forms. With each new regulation, more of Pak's day is devoted to obeying bureaucratic dictates, and less time is spent at home with his family. Pak is afraid that if he did not work so hard, his competition would catch up with him. As it is, he sometimes wonders how long his business can survive.

Pak does not blame the regulatory enforcers, but he is not sure they understand the hardships that they impose. "When they force us too much, then businessmen can't do it," he says. Pak once thought about expanding his business, but not anymore. "If I expand my business, then I will have more headache," he explains. "This is enough for me." Today Pak is content working to make ends meet and provide for his family, but the escalating regulatory burden is making it increasingly difficult for VIP Cleaners to survive.

Some dry cleaners manage to keep their doors open in the face of escalating regulatory costs, but the same cannot be said for many others. Teasdale Fenton Cleaners in Cincinnati, Ohio, filed for bankruptcy in October 1992. The escalating costs of regulatory compliance were largely to blame. Teasdale Fenton was required to pay a certified waste disposal firm \$2,000 per month to dispose of process waste.[1] Other methods of disposal are illegal, even if they pose no greater risk to human health and the environment. Before filing for bankruptcy, Teasdale Fenton employed 160 people and was the largest dry-cleaning chain in the region.[2] In the New York City area, more dry cleaners have gone out of business in the past three years than in the entire previous decade, according to William Seitz, executive director of the Neighborhood Cleaners Association.[3]

If it is difficult to keep a business open in the face of a regulatory onslaught, it is even more difficult to start a business from the ground up. Opening a business requires obtaining everything from business licenses to zoning permits. In 1991 the National Federation of Independent Business determined that opening a new dry cleaner requires filling out and complying with almost 100 forms and manuals from the federal government. In addition to those requirements, in most areas dry cleaners must be licensed, and forms must be filed with local agencies. Dry cleaners in Alexandria, Virginia, for example, are required to obtain hazardous chemical use permits from the local government and to file forms detailing the location and use of such chemicals with the local fire departments and hospitals. Material safety data sheets, obtained from product suppliers, are also required for every potentially dangerous substance used in the facility. It is no wonder that the Environmental Protection Agency estimated in 1988 that the paperwork burden imposed by environmental rules alone was over \$400 annually and could exceed \$1,000 for a dry cleaner, not including costs imposed by the Clean Air Act Amendments (CAAA) of 1990.[4]

When regulations require the use of advanced technologies--such as \$30,000 dry-cleaning machines--the hurdles that must be overcome to create a new business are even higher. Before the CAAA of 1990 took effect, environmental regulations added as much as \$138,700 to the direct costs of starting a new dry-cleaning establishment.[5]

Regulating Small Business

When you stop by Capitol Hill's Lustre Cleaners after work on a typical weekday afternoon, the store is likely to be filled with congressional staffers and Washington careerists picking up and dropping off dress shirts and suits at the last minute. While those responsible for the regulatory burdens imposed on small business are dependent on the services that dry cleaners and launderers provide, few if any recognize the cumbersome impact of federal mandates. The nearly ubiquitous presence of dry cleaners in suburban and urban settings--it is often said that there is one on every corner--allows policymakers to take for granted their continued presence; it is easy to turn a blind eye to the

regulatory plight of entrepreneurs and business owners.

Operators of small businesses face regulatory hurdles at every turn. For dry cleaners, that means clean air regulations governing perchloroethylene (referred to as perc hereafter) emissions and hazardous waste regulations governing the disposal of chemicals. Occupational safety regulations cover exposure to cleaning solvents and require demanding precautions in the handling of garments worn in hospitals and dental offices. Governments at all levels have imposed exacting liability standards that threaten the existence of many dry-cleaning establishments. Those regulations are in addition to the labor codes, wage laws, and tax rules that affect all small businesses nationwide. Consider a few examples:

-- In Southern California, a dry cleaner was fined \$250 for failing to post a listing of employee injuries that had occurred within the last 12 months. The fine was imposed even though the dry cleaner in question had no employee injuries to report. In effect, the business was fined for failing to post a blank piece of paper.

-- On April 18, 1992, the Texas Air Control Board announced that it was fining six dry-cleaning establishments for failure to fully control perc emissions under regulations designed to control emissions of volatile organic compounds (VOC) and other substances that cause smog formation. Perc, however, does not contribute to smog formation, and the EPA itself considers perc "a negligibly reactive compound." [6] For that reason the EPA has proposed specifically exempting perc from regulation as a VOC.

-- As a result of the Occupational Safety and Health Administration's rules on bloodborne pathogens, it is simply too expensive for most dry cleaners to handle any garments from a hospital or medical office, even when there is no risk of exposure. As a result, many simply refuse the business.

-- Because of regulations covering the disposal of so-called hazardous wastes, the costs of disposing of spent cartridge filters and other process waste have skyrocketed. A new filter cartridge can be purchased in San Antonio, Texas, for \$18.75, but its disposal costs \$21.00. [7]

-- The CAAA of 1990 required Victor Bench of St. Louis, Missouri, to spend \$80,000 over three years to bring his dry cleaner into compliance. [8]

-- In Virginia, a dry cleaner is required to submit monthly retail sales tax forms to the state even though the store sells no taxable items. Failure to file the tax forms would result in fines, even though not filing would save time and money for both the business and the government.

Such regulatory nightmares are hardly the intent of federal and state regulatory officials, yet they are the inevitable result of far-reaching regulatory programs.

Small firms, by their very nature, are particularly vulnerable to regulatory costs. Those firms have few employees to spare, so reporting and other paperwork requirements that appear insignificant when drafted become significant drains on manpower once they are implemented. With relatively low sales volumes, small businesses have little income to devote to regulatory compliance. With relatively small profit margins, small businesses have little ability to absorb additional costs that cannot be passed along to consumers. Such regulatory requirements create "artificial 'economies of scale'" that advantage larger firms. [9]

Whereas larger companies may view regulatory hurdles as nuisances that can be absorbed by lowering profit margins or delaying capital investments, those hurdles can threaten a small firm's existence. As the EPA has acknowledged in its Small Business Sector Study:

Firms with 5 or 10 employees do not have legal and engineering staffs to assist them, nor do they have the financial resources available to larger firms. Often their costs per unit of production to comply with environmental regulations are much larger than those of their large competitors. [10]

Whereas a large corporation may have lawyers on staff or on retainer to handle regulatory compliance and permitting matters, small firms often must hire such assistance piece-meal. Environmental regulations, according to B. Peter

Pashigian, "have not only reduced the number of plants in the affected industries but have made it more difficult for small plants to compete with large." [11] Regulatory activity in other areas is likely to have a similar impact.

The inevitable result of elaborate regulatory requirements is that many businesses will fail to comply. Keeping up to date with the reams of regulations issued by state and federal agencies is difficult enough for large businesses, let alone mom-and-pop operations. As the Legal Times reported, for many small businesses "noncompliance is not a matter of choice, but rather the result of a fundamental lack of expertise and resources to identify applicable requirements and implement the necessary means to achieve compliance." [12] "There isn't any way to stay up to date" for most dry cleaners, according to Buddy Gritz of the Metropolitan Dry Cleaners Association, which represents dry cleaners in the Washington, D.C., area.

To some extent, trade associations, such as the Metropolitan Dry Cleaners Association, have helped to fill the gap by providing information about regulatory compliance and other matters. The International Fabricare Institute and several dozen state and local dry-cleaning associations attempt to keep members up to date on regulatory activities that affect dry cleaners. They have also joined the myriad interest groups that descend upon Washington in an attempt to influence the policymaking process in their favor. Over the past several decades, government affairs, including but not limited to regulatory issues, have begun to displace more traditional trade association activities, such as research on improved cleaning and spotting techniques. Still, not all dry cleaners belong to such organizations, and some that do cannot spare the time to stay abreast of all activities.

One consequence of overregulation is the consolidation of the regulated industry. Dry cleaning, because of its small scale, has for years offered significant economic opportunities to immigrants looking for entrance to the marketplace; regulation, by shifting the industry toward larger, consolidated businesses, undercuts those opportunities. "The whole impact of this thing is you are going to see big dry cleaners get bigger. You're going to see mom-and-pop operations fall by the wayside because it's too expensive," says Wade Elam, president and CEO of White Way Cleaners in Nashville, Tennessee. [13]

Even the EPA considers the typical dry cleaner "among the smallest of the small" in the business community. [14] According to the International Fabricare Institute, the typical dry-cleaning outlet is a small, family-owned business that grosses an average of \$200,000 in sales per year. [15] Dry cleaners employ an average of five people and have an average annual payroll of between \$60,000 and \$65,000. [16] Although there are a few large chains and processing plants, 98 percent of dry cleaners have fewer than 50 employees. [17] Dry cleaners have minimal profits with which to absorb additional regulatory costs; estimated profit per firm is only \$10,000 annually. [18] In 1990 the average profit margin for a dry-cleaning plant was 0.43 percent. [19] Nation-wide, the industry employs approximately 175,000 people as machine operators, pressers, retail clerks, and the like. [20]

If small businesses as a whole are acutely susceptible to the impact of government regulations, dry cleaners are even more so because of their extremely small size. With so few employees, dry cleaners can be hurt more than most by small, seemingly unobtrusive, regulatory requirements, such as filing a hazardous waste report that requires an average of 19 hours (and as many as 60 hours) to complete. [21] That can be a significant burden on a firm whose employees put in no more than 200 man-hours per week. In 1989 Newsday reported that regulation could "threaten to drive up to 15 percent of local dry cleaners out of business." [22]

Large Stakes in Small Business

There is evidence that small businesses are important to America's economic performance. Businesses with fewer than 500 employees were responsible for 57.2 percent of all net new jobs created between 1976 and 1986, according to the Small Business Administration. During the same period, 43.7 percent of net new jobs were created by firms with fewer than 100 employees and 26.2 percent were created by firms with fewer than 20 employees. [23] In absolute terms, such firms created over 5 million net new jobs from 1984 to 1988. [24] From 1988 to 1990, 4 million new jobs were created by firms employing fewer than 20 people. That equals the entire net increase in nonfarm private-sector employment during that period. [25] While small businesses were creating jobs and providing economic opportunity, employment by Fortune 500 firms was declining--by some 4 million jobs during the 1980s. [26]

Small business is also important for maintaining the vitality of America's entrepreneurial spirit. Yong Kyun Pak and

thousands like him immigrated to the United States for the opportunity to make a better life through hard work. Small business is an integral part of that opportunity. Through hard work and its accompanying economic rewards, immigrants are capable of gaining an economic stake in the American system that furthers their integration.

The role of small business and entrepreneurship in integrating recent immigrants can be observed in the dry-cleaning industry. Many small dry-cleaning stores are now owned and operated by first-generation Korean immigrants. Dry cleaning is a field of choice because a great command of the English language is not necessary--except for complying with regulations. In Chicago, for example, it is estimated that 60 percent of dry-cleaning shops are owned by Korean-Americans.[27] Such a preponderance of Korean-owned dry cleaners has become common in most major cities. The Neighborhood Drycleaners Association in New York has 900 Korean members.[28]

Regulations affect all dry cleaners. The sheer quantity of paperwork and the amount of technical knowledge necessary to stay in regulatory compliance are daunting for any shop owner. "The government talks in a foreign language, a technical language that the average dry cleaner doesn't understand," commented William Seitz, executive director of the Neighborhood Cleaners Association, to *Newsday*. "It's English, but you couldn't prove it." [29] The language difficulty is compounded for those who have yet to master English as a second language, such as immigrant entrepreneurs. Despite the presence of many local dry-cleaning associations that cater to the Korean community, regulatory compliance is most difficult for the most vulnerable segments of society-- those that have yet to integrate themselves into mainstream America.

To understand the range and scope of the regulation of small business, it is necessary to examine specific examples of regulation, their intent, and their impact. What follows is a discussion of the reasons for and the nature and impacts of particular regulations that affect the dry-cleaning industry.

Perchloroethylene

Dry cleaning is not truly a "dry" process. Liquid chemical solvents are used to remove stains and soil from clothing and other textile products. It is "dry" only insofar as no water is used. The use of solvents in the cleaning process has always been the primary reason for regulation of the dry-cleaning industry. As the EPA has declared, "Most of the problems in the dry cleaning industry are related to dry cleaning solvents." [30]

It is believed that dry cleaning was discovered accidentally in France during the mid-19th century.[31] For years, turpentine and camphene were used to remove spots. Later, other solvents were used, typically substances derived from petroleum, such as kerosene. Needless to say, the use of such highly flammable substances posed a significant threat of fire to early cleaners, and fires were frequent at cleaning plants.[32] As a result, the first regulations to affect dry cleaning in the United States were local ordinances intended to reduce the risk of fire.

The primary dry-cleaning solvent used today is perchloroethylene, also known as tetrachloroethylene and commonly referred to as perc or PCE. First used in the 1930s, perc is now used, alone or in combination with other solvents, by almost 90 percent of dry cleaners in the United States. Some 79 percent of dry cleaners use perc alone, according to the International Fabricare Association.[33] Perc displaced previously used solvents because it was and remains easier to use. Perc is both less toxic and less flammable than many of the alternatives, and it can be reclaimed for reuse more efficiently as well.[34] William Farland, director of the Office of Health and Environmental Assessment at the EPA told *Newsday*, "The data say [perc] is one of the safer options." [35] Other solvents, such as "solvent 113" and methyl chloroform, are to be phased out under the Montreal Protocol, which eliminates the use and production of chlorofluorocarbons, believed to cause depletion of stratospheric ozone.

While perc has been a boon to the dry-cleaning industry, environmental activists, regulatory officials, and proregulation public-interest organizations are less pleased with the prevalence of its use. The EPA classifies perc as an animal carcinogen and places it on the continuum between possible and probable human carcinogens.[36] *Consumer Reports* claimed, "You're likely to be exposed to some level of perc simply by wearing recently dry-cleaned clothes or storing them in your house." [37] An opinion piece in the *New York Times* labeled perc "highly toxic" and called upon the city government to "remove all the city's cleaners from apartment buildings." [38] "The consequences of exposure to perc range from general ill health to cancer and birth defects for workers, consumers and people who

live near dry cleaners," according to Greenpeace, an international environmental activist organization. Greenpeace has also cited claims that dry-cleaned clothing "placed in a closed car next to a bag of groceries has contaminated food in less than one hour." [39] Greenpeace has called for complete elimination of perc usage as part of its campaign to phase out the use of chlorine in all of its applications. [40] In its place, Greenpeace recommends the use of "Eco-Clean," an "organic" washing process virtually indistinguishable from the "wet" cleaning process used by most consumers at home. That would be the end of dry-clean-only garments. [41] While phasing out the use of chlorine chemistry may seem like an extreme step, the EPA has responded to Greenpeace's pressure by investigating Eco-Clean's potential as a replacement for perc. [42]

Certainly, chemicals such as perc can pose risks if improperly handled. Exposure to high levels of perc--200 parts per million (ppm)--for prolonged periods of time can induce headaches, dizziness, nausea, and eye and skin irritation. Higher exposures intensify those reactions and can, in extreme cases, result in unconsciousness or even death. High levels of perc exposure also have been correlated with damage to the liver and central nervous system. Perc is also moderately toxic if ingested. Like many chemical substances, perc is safe if handled properly and exposures are limited but dangerous if used carelessly.

The levels at which health effects of perc have been documented are higher than the low levels (below 30 ppm) typically encountered in a dry-cleaning establishment. [43] Thus, the question remains of whether perc poses a significant risk to human health or the environment at the exposures typically encountered in dry cleaners and from accidental environmental exposure.

The initial claims that perc might be a human carcinogen were based on animal tests. A 1977 bioassay conducted by the National Cancer Institute indicated that perc could induce liver cancer in mice but not in rats. [44] A 1985 study on both rats and mice of both sexes by the National Toxicology Program also concluded that there was "clear evidence" of the rodent carcinogenicity of perc. [45] Although studies conducted by Dow Chemical and others found no statistical increase in cancer rates in similar rodent tests, [46] the evidence seems to indicate that perc can cause cancer in rodents.

Although positive results in animal tests can provide some indication of whether a compound is potentially carcinogenic to humans, such tests are never conclusive. Some toxic effects are species specific. Compounds that cause cancer in rats do not always cause cancer in mice, and vice versa. [47] In all cases, the effect of exposure to potentially toxic compounds is dose specific; as the saying goes, "The dose makes the poison." Because animal tests are conducted by force-feeding rodents very high dosages of the chemicals in question, it is extremely difficult, if not impossible, to extrapolate a human dose-response from animal tests.

Consider the fact that the same animal tests that indict chemical compounds such as perc, saccharin, and ethylene dibromide (a pesticide used on grains) also indict compounds that occur naturally in coffee, peanuts, and jasmine tea. As Lois S. Gold of the Lawrence Berkeley Laboratory and several colleagues noted in *Science*, "It is probable that almost every fruit and vegetable in the supermarket contains natural pesticides that are rodent carcinogens." [48] That does not mean that people are at grave risk from natural compounds in their diet; instead, it means that synthetic compounds have much less relevance to the incidence of human cancers than is widely believed and reported by the media. [49] As Gold et al. clearly state, "What is important in our analysis is that widespread exposures to naturally occurring rodent carcinogens may cast doubt on the relevance to human cancer of far lower exposures to synthetic rodent carcinogens." [50]

To demonstrate that fact, Gold et al. developed the human exposure/rodent potency index as a means of ranking the potential carcinogenicity of regular human exposures to rodent carcinogens. By that index, the ethyl alcohol (18 milliliters) in a 12-ounce can of beer receives a rating of 2.8, the caffeic acid (24.4 milligrams) in a whole apple receives a 0.1, and the Alar (5.89 micrograms) contained in a six-ounce glass of apple juice in 1988 receives a 0.002. By comparison, a liter of well water from Woburn, Massachusetts, that was contaminated with 21 micrograms of tetrachloroethylene (perc) receives a 0.0003. [51] That level of exposure to perc is the approximate equivalent of 21 parts per billion, or over four times the EPA standard for water contamination. [52]

If perc posed a significant risk of cancer, one would expect to see epidemiological evidence. In particular, there should be increased rates of cancers among dry-cleaning workers who are exposed to significant levels of perc in their

working environment. According to the assumptions of the EPA, one would expect approximately 350 additional cancers annually among dry-cleaning workers from perc exposure. [53] Should those assumptions be correct, the high number of expected cancers would be confirmed by the existing epidemiological evidence.

Although clear epidemiological evidence would be expected, it has not been found. Several studies of dry-cleaning and laundry workers have been conducted. [54] The majority of those studies either were unable or did not attempt to separate those exposed solely to perc from those exposed solely to petroleum solvents or a combination of solvents. Several of the studies, such as that conducted by the National Institute of Occupational Safety and Health, indicated a slight increase in cancer mortality rates for dry-cleaning workers. [55] However, some studies have indicated that the increase could result from the fact that "dry cleaners may smoke more than members of other occupations" and that alcohol use and socioeconomic status may also be factors. [56] In those studies in which it was possible to subdivide the workers by exposure to different solvents, an increase was not observable in the subgroups exposed only to perc. To date, there is no direct evidence that dry-cleaning workers face an increased risk of cancer because of exposure to perc; in the words of the EPA Science Advisory Board, perc "is an example of a chemical for which there is no compelling evidence of human cancer risk." [57] Therefore, there is no evidence that people exposed to lesser quantities of perc, from dry-cleaned textiles, ambient sources, and the like, are at increased risk of cancer.

Exposure to perc in dry-cleaning operations is limited by federal and state government standards that limit occupational exposure and require respirators for certain procedures. Moreover, dry cleaners are required to provide material safety data sheets describing the potential risks posed by perc and outlining proper handling procedures. Some dry cleaners show their employees a videotape produced by the International Fabricare Institute to fulfill that requirement.

The Occupational Safety and Health Administration regulates perc as a hazardous air pollutant and potential workplace hazard. OSHA had originally proposed a standard (known as a permissible exposure limit) of 50 ppm--the same standard in place in Germany and the United Kingdom--but after receiving public comment, OSHA issued a final rule establishing a standard of 25 ppm. [58] A coalition of industry organizations and individual companies successfully challenged that standard on both scientific and procedural grounds. The Eleventh Circuit Court of Appeals agreed, determining that OSHA's procedures in determining the perc standard, and the standards for 427 other potentially hazardous air pollutants, did "not comport with statutory requirements" and that OSHA had "failed to establish that existing levels in the workplace present a significant risk of material health impairment or that the new standards eliminate or substantially lessen the risk." [59] The court also spoke directly to the perc standard, finding that "OSHA's analysis of perchloroethylene (perc) is a prime example of the problems with OSHA's approach to this rulemaking." [60] The OSHA rule for all 428 substances was vacated and remanded.

OSHA decided not to appeal the court's decision, and thus the national standard for perc exposure has returned to 100 ppm. [61] Nonetheless, for three years dry cleaners were expected to comply with a 25-ppm standard--and were cited for noncompliance--that was not justified by the scientific evidence. As of April 16, 1993, 12 states had opted independently to maintain the more stringent standard, despite the appeals court ruling. [62]

Meeting the more stringent standard is not easy. It requires the use of the more expensive "dry-to-dry" cleaning machines in place of the older "transfer" machines, which require that the machine operator manually transfer materials from the washing compartment to the drying compartment. That transfer allows for increased exposure to evaporated perc. A new dry-to-dry machine can cost as much as \$60,000, depending on the machine's capacity--or, in other words, six times the estimated annual profit of the average dry cleaner. [63] Although most jurisdictions give dry cleaners several years in which to achieve compliance, employers must provide machine operators with respirator masks in the interim. Yet where perc is concerned, that is only the beginning.

Perc in the Sky

The CAAA of 1990 are the largest piece of environmental legislation ever enacted by the U.S. Congress. Few industries or regions of the country are unaffected by them. The CAAA are one of the most ominous regulatory threats facing the dry-cleaning industry, particularly the provisions governing the use of perc. By some estimates, the regulations aimed at reducing perc emissions could force 15 to 20 percent of dry cleaners to shut their doors. [64]

The primary CAAA regulatory standards for controlling airborne emissions of perc are the National Emission Standards for Hazardous Air Pollutants (NESHAP). Those standards, which became final in September 1993, will impose regulatory costs totaling more than \$30 million on America's dry-cleaning establishments.[65] The impact of the standards will be felt by all but those ahead of the regulations or those too small to attract the attention of regulators.

The NESHAP are promulgated under title III, section 112, of the CAAA. The goal of that provision, perhaps the most sweeping section of the CAAA, is to reduce or eliminate emissions classified as "hazardous air pollutants." "Industrial plants from large petrochemical complexes down to the corner dry cleaner are potentially affected," said Lydia Wegman, then-deputy director of the Office of Air Quality Planning and Standards at EPA.[66] The total cost of the provisions will top \$6 billion annually once they are fully implemented.[67]

Despite the tremendous costs of the NESHAP provisions, there is little evidence that they will produce measurable health benefits. The EPA has reportedly acknowledged that the ambient concentrations of hazardous air pollutants to which people are typically exposed are so small as to render epidemiological measurement impossible.[68] At present, the adverse health impacts of ambient levels of hazardous air pollutants are based on studies, such as those discussed earlier, of the effects of high concentrations on humans and laboratory animals. In those studies it is typically assumed that there is no threshold exposure below which there is no risk to human health. The result is that in many cases, the NESHAP address only theoretical risks to human health, not demonstrated threats. Moreover, the EPA routinely assumes that individuals are more exposed to hazardous air pollutants than they are, in reality, likely to be. Those "conservative" assumptions combine to radically overstate the actual risks posed by air pollutants such as perc. Even granting the EPA's risk assumptions, only a small percentage of cancer deaths in the United States can be attributed to all 189 designated hazardous air pollutants combined--only 1,028 of the almost 500,000 annual cancer deaths in the United States.[69] That is less than one-quarter of 1 percent of U.S. cancers. Yet though ambient concentrations of perc and other air pollutants are minimal--too small to pose an appreciable risk to human health--they are nonetheless tightly regulated.[70]

NESHAP are typically enforced through the imposition of technology standards. In other words, compliance is demonstrated by installing emission control technologies that have been identified by the regulatory agency as sufficiently effective. While a specific technology is not always mandated, the level of emission control required is a function of the available technologies of which the EPA is aware. Thus, the standard is based on what is achievable, not what is required to protect human health or the environment.[71] That often results in the EPA's pushing for the most advanced emission control devices available, even if the use of those devices is unwarranted by public health or environmental concerns.

In the case of dry-cleaning plants, the standards take two forms: maximum achievable control technology (MACT) for larger emitters and generally available control technology (GACT) for "area sources." The MACT standard requires standards "no less stringent than the level of emission control currently achieved at the best performing 12 percent of similar sources." [72] Beyond that, the standard is at the discretion of the EPA administrator. New facilities must meet "the level of emission control currently achieved at the best performing similar source." [73] The standard thus tilts the regulatory field in favor of established businesses by inflating the costs that must be met by new firms. The GACT standard may be as stringent as the MACT, but the EPA administrator has the discretion to set it at the level that "the Administrator determines is reasonable." [74]

The final NESHAP rule issued by EPA in the Federal Register requires all but the smallest dry cleaners to have specified pollution control equipment in place within three years. Dry cleaners are required to purchase refrigerated condensers to control vented perc emissions from dry-cleaning machines. Dry cleaners that use transfer machines must, in addition, install room enclosures to prevent emissions during the transfer of garments from the washer to the dryer. The rule also mandates that all new machines must be dry-to-dry machines: "New transfer machines are effectively banned." [75] Transfer machines are of particular concern to EPA because they emit, on average, 61 percent more perc per 100 pounds of clothes than do dry-to-dry machines. [76] As a final requirement, the EPA mandates weekly and monthly monitoring and record keeping.

For the typical dry cleaner using a dry-to-dry machine, the capital cost of that requirement alone is expected to be

approximately \$6,000. Dry cleaners operating transfer machines will spend several thousand dollars more on room enclosures. Annualized costs are estimated at \$1,000, plus an additional \$460 for monitoring and record-keeping requirements. The required refrigerated condensers will also result in a marginal increase in energy use, and the use of carbon adsorbers will increase the cost of waste disposal slightly. Nationwide, the EPA has estimated that the proposed NESHAP for perc will cost the dry-cleaning industry \$3.9 million to \$9 million annually when fully implemented and will have capital costs of \$35 million.[77]

Although the NESHAP were less severe than some had feared--there was speculation that the EPA would require the replacement of in-use transfer machines by new dry-to-dry machines--it will have a significant impact on many existing firms and will raise the cost of entry into the business. Few dry cleaners relish the thought of spending several thousand dollars on pollution control equipment, particularly in the absence of sound scientific justification. As if the NESHAP were not enough, some states, such as New York, have proposed implementing stringent regulations of their own.[78]

It should also be noted that the final rule issued by EPA is decisively more stringent than the NESHAP that were originally proposed in the Federal Register and subjected to public comment.[79] The original proposal would have allowed for more flexibility in meeting the requirements, and compliance would have been less costly. Ten months later, the EPA published in the Federal Register a revised standard based on "the availability of new information" about possible emission control methods, particularly some that would limit emissions from transfer machines.[80] The fact that the EPA was unaware that other control methods existed when the regulation was initially proposed highlights the difficulties faced by federal agencies in attempting to draft regulations covering industries with which they may not be familiar.

Before the NESHAP, perc emissions were to be regulated as VOCs, a component in the formation of tropospheric ozone, commonly referred to as "smog." However, beginning in the early 1980s, the EPA questioned whether perc was reactive enough to contribute to urban smog, and in 1983 the agency first proposed that perc be listed as "negligibly reactive" and therefore exempt from the Clean Air Act's regulatory requirements.[81] In 1991 the EPA withdrew a proposed rule to regulate perc as a VOC.[82] The EPA's plan is to regulate perc emissions under NESHAP, but not as VOCs.

Despite the change in EPA policy, dry cleaners in some parts of the country are still being regulated as though perc contributed to urban smog. For example, in 1992 the Texas Air Control Board (TACB) fined several dry cleaners for failing to control "air pollution of volatile compounds," namely perc. A TACB official, when challenged on the matter, cited the Texas regulations and noted that the EPA's decision to exempt perc emissions from VOC controls would have "no automatic effect on TACB rules." [83] The TACB was saying, in effect, that the negligible impact of perc on ozone formation was less important than the existence of regulations that could be enforced. Regulation should be promoted for its own sake, regardless of the lack of benefits provided.

In other areas, the continued listing of perc as a potential ozone precursor may have had the effect of actually increasing ambient tropospheric ozone levels. That possibility has been raised by the County of San Diego's Air Pollution Control District. Under EPA and California regulations, the district "was required to issue emission reduction credits (ERCs) for substantial reductions in emissions of perchloroethylene at a single source (107 tons per year). Under the existing VOC definition, these ERCs may now be used to offset emission increases from new sources of VOCs whose photochemical reactivity is not negligible, resulting in a net increase in ozone precursors." [84] Thus, not only are there no appreciable benefits from regulating perc as a VOC, there may in fact be environmental costs. Interestingly enough, at least one environmental organization, the Natural Resources Defense Council, has officially opposed perc's reclassification, charging that the "EPA has not evaluated the full and relevant consequences of the proposed actions." [85]

Wasteful Regulations

The EPA classifies perc as a hazardous waste when discarded or otherwise disposed of. In addition, existing EPA regulations classify any wastes that are "mixed with" or "derived from" perc as hazardous. Under that definition, used perc and filter cartridges that contain minute amounts of perc are classified as "hazardous wastes." [86] By the EPA's

own admission, "A regulated hazardous waste handler must do hundreds of things correctly to fully comply with the regulations, yet doing only one thing wrong makes the handler a violator." [87] In the case of the typical dry cleaner, that means storing hazardous wastes in properly marked containers and keeping detailed records of the use, transportation, and disposal of the wastes.

Because of the complexity of the hazardous waste regulations--the EPA has acknowledged that "the definitions of 'solid waste' and 'hazardous waste' are exceedingly difficult to understand even for the most experienced staff" [88]--most dry cleaners contract with certified hazardous waste disposal firms to ensure regulatory compliance. SafetyKleen provides those services for most dry cleaners. Because SafetyKleen is also required to comply with the regulations governing the handling, treatment, and disposal of hazardous waste, the costs of disposal are inflated. Dry cleaners will thus spend as much as \$2,000 or more disposing of cartridges and other "hazardous" materials. The regulations have inflated the costs of disposal so much that in some parts of the country it costs more to dispose of a filter cartridge than it does to purchase one new.

The paperwork burden imposed by the hazardous waste regulations is substantial. Numerous forms and permit applications are typically required for proper percolation handling and disposal. Among those is the EPA's five-volume National Survey of Hazardous Waste Generators, the first volume of which contains over 80 pages of instructions on how to fill out the remaining volumes. "They even sent instructions on how to read the instructions," according to Gerald Levine, associate director of the Neighborhood Cleaners Association. [89] Such monstrous documents could intimidate any small business owner, let alone a recent immigrant who might not have complete control of the language. The EPA's "1991 Hazardous Waste Report" required an estimated average of 19 hours--nearly half of a work week--to complete, according to the EPA. [90] Dry cleaners interviewed for this study suggested that the actual time required is significantly greater. The EPA's "Hazardous Waste Report" is in addition to whatever state requirements are in place. In some states, it may cost over \$800 simply to obtain hazardous waste permits from local agencies. [91] The hazardous waste regulations are yet another layer in the government burdens threatening to smother small business in America.

While percolation and other substances that are listed as hazardous wastes are regulated to safeguard public health and safety, there is little relationship between the extent of regulation and the potential benefits provided. It has been estimated that regulations governing the land disposal of wastes can cost as much as \$4.5 billion for every statistical premature death that is averted. [92] Cleanup standards can be even more expensive, topping \$15 billion per premature death averted in at least one instance. [93]

Many people claim that such analysis errs by attempting to place an economic value on human life. However, that objection misses the point. Every dollar spent complying with existing regulations is money diverted from other uses, ranging from worker benefits, such as medical coverage, to capital investment that can lead to increased economic growth and higher living standards. Just as environmental quality can provide benefits to human health, so can economic growth. Evaluating the costs and benefits of regulations provides a means of establishing priorities in a world of scarce resources where not every social problem can be addressed simultaneously. [94] That is true in the case of all regulations, not just those controlling the management of hazardous wastes.

More important is the fact that study after study indicates that wealthier populations are healthier populations. [95] Diminishing the wealth of an economy by unnecessary environmental regulation can have the perverse effect of actually increasing the mortality rate. While it is often claimed that particular regions benefit economically from environmental regulations--through the creation of high-paying, specialized jobs needed to meet regulatory requirements--such benefits do not represent actual wealth creation as much as they do wealth redistribution. That is, those regulations only enrich some communities at the expense of others. [96]

Existing data indicate that imposing \$2 million to \$8 million in additional economic costs will result in one premature death that would not otherwise have occurred. [97] That death will occur because funds will have been diverted from pursuits that could improve health and well-being. Thus, some hazardous waste regulations may have a negative impact on human longevity and the quality of life. Unemployment has a similar impact on human health.

Totally Liable

The greatest fear for the owner of a dry cleaner today is being found liable for groundwater contamination. Such a finding can instantly bankrupt any dry-cleaning operation. For that matter, environmental liability, as defined and administered under the Comprehensive Emergency Response, Compensation and Liability Act (CERCLA, commonly known as Superfund) can bankrupt any small business that is implicated. Dry cleaners are not typically engaged in "midnight dumping" or other suspect waste disposal practices. Nonetheless, they are often snagged by the long arm of CERCLA liability.

Under Superfund, liability is strict, joint and several, and retroactive. That means that any firm or individual that is even remotely connected to a Superfund site can be declared a "potentially responsible party," or PRP. Any PRP can be held liable for 100 percent of the cost of investigation and cleanup of the site. "As it stands, one firm out of 100 can be found financially liable for the entire cost of cleaning a site, even if the one firm contributed the smallest part of the waste." [98] Moreover, the retroactivity of the statute reaches to all former PRPs and holds individuals or firms liable for actions taken in the distant past, even if such actions were both statutorily permitted and generally accepted as safe business practices. As a general rule, it is better to avoid even the potential of being named in a Superfund case. As environmental lawyer William D. Wick notes, "If someone alleges that your clients are liable under CERCLA, a judge will almost certainly agree." [99]

In practice, liability is attached to PRPs more on economic or political grounds than on considerations of who did what to whom. "There's a tendency to go for the deep pockets," notes Clemson University economist Bruce Yandle. [100] After all, since Superfund requires cleanup to "cleaner than clean" standards, someone has to pay for it. As a result, Superfund liability has been extended to waste haulers, municipalities, lending institutions, and even schools. [101] In one Michigan cleanup, Superfund liability even reached a local Girl Scout troop. [102] Liability expert Peter Huber notes that "the strict joint and several liability rules can reach firms that are cleaning up the pollution as easily as those that created it." [103] The long arm of Superfund can impose liability on firms and individuals that cannot rightly be considered responsible for the mismanagement of hazardous substances. Moreover, once the first groundwater contamination suit is filed, more are almost certain to follow. As the International Fabricare Institute discovered when it lost a groundwater contamination suit, "the court's ruling may have prompted other landowners near IFI to pursue CERCLA [Superfund] liability claims against IFI." [104]

Consider the case of groundwater contamination discovered near the Lincoln Center shopping center in Stockton, California. In the mid-1980s trace amounts of perc and perc-related compounds were discovered in groundwater near the center. Among the several dozen shops and businesses at Lincoln Center over the years had been three dry cleaners, all of which used perc. Investigations indicated that some or all of the dry cleaners, and some or all of the past and present owners, were most likely responsible for some of the contamination. In that instance there was no evidence to suggest which dry cleaners were responsible for the contamination or whether the perc could have been generated from another source. Because no individual dry cleaner could be identified as the sole or primary culprit, each dry cleaner, and all previous owners of the dry cleaners, could potentially be held liable for the entire cost of cleanup and remediation of the Lincoln Center property. That is not unusual. As Huber notes, "Several courts have concluded that in pursuing a Superfund claim for an injunction and reimbursement of cleanup costs, the government need only prove that the defendant's waste was disposed at the site and need not link its costs to wastes created by the defendants." [105]

In other cases, the determination of liability has been completely arbitrary. When perc is found in groundwater, it is typically assumed that dry cleaners are responsible. Such, however, is not always the case. Perc is commonly found in solvents, auto part dips, degreasers, and cleaners used in automotive repair shops. Given the minute amounts of perc needed to satisfy the regulatory definition of contamination of 5 parts per billion--one ounce will legally contaminate 2,537,662 gallons--it is reasonable to assume that other firms are often responsible for the contamination. Regardless of whether the contamination was probably caused by a previous land owner or tenant, the existing owner or tenant can be held 100 percent liable.

Even if a small business can demonstrate its innocence, the liability provisions are not without their costs. One dry cleaner in Southern California was forced to spend over \$20,000 out-of-pocket for scientific tests and groundwater samples in order to defend himself against a liability claim by demonstrating that a government-owned garage that had been located nearby was probably responsible, at least in part, for the groundwater contamination. Another dry cleaner

was asked to spend a similar amount on monitoring wells to demonstrate his innocence when inspectors had already determined that his store was not a probable contributor.

The costs involved of groundwater cleanups are enormous. Typically, cleanup will cost several million dollars.[106] Well investigations alone can cost \$4,000 to \$8,000 each. The legal actions can drag on for several years without resolution. Needless to say, such costs create a strong incentive to avoid potential liability. "The threat of environmental cleanup and legal battles has persuaded a number of shopping malls to refuse to lease to cleaners," reports Drycleaners News.[107] Two large food store chains--Publix in the Southeast and Lucky Stores on the West Coast--have decided not to renew the leases of dry cleaners, and a similar recommendation was presented to the membership of the Shopping Center Association.[108] In addition, concerns about liability have made it extremely difficult for dry cleaners to obtain loans from lending institutions. Banks are rightfully concerned about the potential of being held liable for contamination on a borrower's property.[109]

A similar response has been observed on the part of insurers. Many insurance companies are loath to insure small businesses for the costs of hazardous waste cleanups. "For all practical purposes insurers have ceased to offer environmental coverage," says Yandle.[110] That is to be expected. With the high cost of cleanups and the arbitrary standards defining who is "potentially responsible" for any given contamination, insurance companies have a difficult time pricing such coverage.[111] Insofar as that development forces self-insurance, small business is disadvantaged even more.[112]

Small businesses, both dry cleaners and others, simply cannot afford the costs that may result from the current standard of liability. Far from being simply another business expense, the current liability costs are driven by a regulatory standard that eliminates common-law standards of tort liability. Rather than being presumed innocent, businesses that use chemicals detected in the ground are presumed "potentially responsible." Such businesses are guilty until they can prove their innocence--at tremendous legal expense. It is difficult for any business, particularly the smallest, to sustain such costs.

OSHA at the Counter

There is never a good day for an occupational safety and health inspection. An inspection is nearly always a laborious and disruptive process for a small business. For Wayside Cleaners in Portsmouth, Virginia, the December morning that an inspector from the Virginia Department of Labor and Industry (DLI) arrived unannounced was worse than most. Bill Griggs, vice-president and in-store manager of Wayside, was working on the payroll when the inspector arrived. To make matters worse, one of Wayside's machines was on the blink and several employees had called in sick. No matter, when an inspector visits, it is time for an inspection. The store manager and an employee representative have little choice but to spend the next several hours, in some cases the next few days, participating in the inspection process. "You must stop whatever you're doing, no matter what," Griggs explained in a presentation to the Mid-Atlantic Cleaners and Launderers Association.

Occupational safety and health inspections are typically spurred by a complaint--from a disgruntled former employee, customer, or competitor. The inspector's charge is to scrutinize every inch of the facility in search of technical violations of regulations promulgated by the federal Occupational Safety and Health Administration and the authorized state or local agency. State agencies are essentially deputized by OSHA to ensure that employers are maintaining working environments free from unreasonable or excessive risks. Everything is examined, from the placement of required informational posters and material safety data sheets on all chemicals used to the wiring of desktop electrical equipment and the polarity of electrical sockets. Inspectors interview employees and take air samples to measure the concentrations of regulated emissions. Given the thorough procedures and stringent regulatory requirements, discovery of a technical violation of some kind is virtually guaranteed. "They will find something, somewhere," warns Griggs. He should know. In his store they found over 30 "serious" violations and several "other than serious" violations.

Inspections are hardly quick proceedings; the Wayside inspection lasted almost three days--three days during which Griggs could spend no time tending to his business, talking to customers, or overseeing Wayside's operations. As a small business operator, "your main concern is getting your product out to your customer," notes Griggs, but it is hard to focus on such things during an inspection. Instead, store owners must concern themselves with the prospect of being

run out of business in the name of public health and safety.

That could have been the fate of Wayside Cleaners, which was potentially liable for over \$30,000 in fines. When the 32-page DLI citation arrived, four months after the initial inspection and Griggs's initial plea-bargaining on behalf of Wayside, Griggs was fined \$13,200. The following were among his "serious" violations.[113]

-- Electrical cords ran through a countertop "not separated from contact with counter by tubes or bushings of noncombustible, nonabsorbent insulating material" beyond that on the wire itself. That regulation can also apply to computers for which cords run through desks or countertops. Wayside was also cited for using extension cords as a "substitute" for fixed wiring to power two appliances. A similar charge could be made against surge protectors not securely fastened in place.

-- Smoking was "permitted in flammable or combustible liquid storage areas." In point of fact, smoking was not allowed in the work area. However, Wayside did allow employees to smoke in a bathroom located behind the dry-cleaning area. The bathroom was fully enclosed and separated from the work area by a cement wall and a fully closing door.

-- Wayside failed to provide an "educational program" complete with documentation of annual training for all employees on the operation of portable fire extinguishers to be used in case of an emergency. Employers are required to have such programs for emergency equipment and workplace hazards, such as cleaning solvents, and provide documentation that all workers participated. OSHA is currently considering requiring employers to provide safety training and refresher courses on the operation of motor vehicles for employees who are required to drive as part of their jobs.[114]

-- One of Wayside's approximately 100 electrical outlets was found to have reversed polarity.

-- At the time of the inspection, Wayside had yet to implement and document an "energy control procedure" to render machinery inoperative during repairs or routine maintenance. Known as "lockout/tagout," that procedure typically includes unplugging machinery and placing marked, locked covers on the plug to prevent its use. OSHA estimates that the mortality risk posed by failure to implement a proper "lockout/tagout" procedure is four per million exposed. Issued in 1989, the OSHA regulation is estimated to cost \$70.9 million per premature death averted.[115]

-- "A clear space of not less than 3 feet was not kept free from storage on all sides of paint booth(s)." Wayside had allowed the temporary storage of boxed fluorescent light bulbs on top of one paint booth that is used for spraying dye on leather and suede garments, and "storage shelves and a water fountain were present within 3 feet of one of the booths."

Those violations were all declared "serious" by the DLI.

The cost of inspections is not limited to the fines levied by the government inspectors. Inspections disrupt daily business practices and absorb significant amounts of staff time and energy. Moreover, in the wake of an inspection, the owner of a small business can be required to expend significant resources in purchasing equipment and materials to comply with the regulatory mandates. Mandated eye-wash stations can cost over \$400. Certified safety cabinets, for storage of solvents, spot removers, and the like, can cost well over \$1,000 apiece. Outfitting employees with certified respirators for use when operating transfer dry-cleaning machines (machines that require manual transfer of the clothing from the washer to the dryer) can cost a few hundred dollars more.[116]

Unlike many dry cleaners, Bill Griggs contested several of the fines. Moreover, he questioned whether the DLI itself complied with OSHA regulations. Upon arrival at the DLI office, Griggs asked about the apparently clear ly posted emergency evacuation route for fire and other emergencies, as required by the regulations the DLI is entrusted with enforcing. Griggs said of the mazelike office, "If smoke started in there, I would not have known how to get out." Sure enough, the DLI was not in compliance with the same regulations it was imposing on small businesses.[117] Having pointed out the potentially arbitrary nature of DLI enforcement, Griggs was in a better position to negotiate a reduction in Wayside's fines. Needless to say, it is unlikely that most dry cleaners would respond to citations in a similar manner.

Meanwhile, other regulatory agencies can make it difficult or impossible for operators of small businesses to comply with OSHA requirements. For example, the DLI cited Wayside for a fire hazard because wiring for electrical equipment was located within 20 feet of Wayside's paint spray booths. The floor plan had been approved when the building was built, and it had been updated to comply with local building codes. Wayside's attempts to expand the building to provide more space were thwarted by city ordinances. As Griggs responded to the DLI, "The room is configured in such a way that the spray booths could not be moved out of a 20-foot range from the electrical equipment." Griggs then proposed that Wayside build a wall to separate the wiring from the booths. At the time of this writing-- over 18 months from the date of the original inspection-- that proposal has yet to receive final approval, despite the DLI's description of the offense as "serious."

A Chilling Effect

Bill Griggs took his experience with state inspectors in stride, but he is an exception. The ability of local regulators to impose fines and pursue lawsuits against owners of small businesses has had a chilling effect on many dry cleaners. Behind closed doors, business owners are eager to share their horror stories of draconian regulations and their arbitrary enforcement. Few, however, are willing to go on the record. "We're going to have to come forward eventually," said one dry cleaner in South Carolina. He added: "I try to comply, but I'm sure there's something I don't comply with. They could just come down and inspect me," if his story were told. It all comes down to one question: Why jeopardize my business? The potential for retaliation by regulatory agencies is too great.

Do dry cleaners have reason to fear such actions? Perhaps they do. Executives in many heavily regulated industries prefer not to discuss their run-ins with the regulatory apparatus.[118] That is particularly true in industries dependent on regulatory approval of permit applications for business.[119] Whether regulatory retaliation is probable or not, it has become a very real concern in the small-business community. After all, the threat is real. "They can regulate you out of business, if they want to," commented one Southern California dry cleaner who refused to go on the record. In his view, and that of many others, there is too much at stake to risk regulatory retaliation.

Some dry cleaners cite the disparate treatment received by outspoken business owners, and some talk of suspicion about recent charges of groundwater contamination that have been leveled against the International Fabricare Institute's Maryland headquarters. It would be virtually impossible to prove that regulatory enforcers acted from ulterior motives in any particular instance. Nevertheless, there is no doubt that regulatory actions at least appear to be motivated by an animus against particular businesses or owners.

Consider the case of one dry cleaner in Northern California. Shortly after he opened a downtown store, groundwater contamination was discovered at two nearby wells. The store was examined by the local Water Quality Control Board, which concluded that the facility was unlikely to have contributed to the groundwater contamination. Not only did the store surpass regulatory guidelines, but it had opened relatively recently. A few years later, the owner's business practices had not changed, but the attitude of the regulatory agency had. The dry cleaner was now asked to take soil and groundwater samples and install several monitoring wells--at a combined cost of approximately \$25,000. Little had changed in the intervening years other than the dry cleaner's willingness to challenge what he perceived as the overzealous and arbitrary regulation of his industry. He is unwilling to say that his activism was the sole cause of the new regulatory demands, but he will not rule it out. After a few such stories are spread throughout the industry, the willingness of dry cleaners to share their own stories dries up rather swiftly.

Dealing with HIV

One set of OSHA standards not at issue in the Wayside inspection is that governing occupational exposure to bloodborne pathogens. Concern about potential infection with HIV and contraction of AIDS has led to regulation of materials potentially contaminated with HIV and other bloodborne pathogens. Hospitals and dentist's offices are thus required to treat soiled clothing and materials as biohazards, and additional precautions are now mandated under federal law, including stringent record-keeping requirements. The blood-borne pathogen law snares dry cleaners too.

Under OSHA's regulations governing "Occupational Exposure to Bloodborne Pathogens,"[120] any company whose employees come into contact with materials on which there is a "reasonably anticipated presence of blood or other

potentially infectious materials" must comply with federal requirements designed to limit exposure to bloodborne disease. Such materials are classified as "biohazards." That means that any time a launderer or dry cleaner handles clothing or other materials from a hospital, medical office, dental office, nursing home, or other medical facility, the firm must engage in a series of moderately costly safety procedures. That holds for scrubs from a maternity ward or dentist's office, as well as the lab coats of a speech pathologist whose office is located in a hospital.

By establishing a rigid definition of "contamination," the regulations extend to many materials that pose no threat to any dry-cleaning employee, such as lab coats that are brought in for pressing after having already been washed.

The requirements for handling potentially contaminated materials range from standard reporting and disclosure to handling controls. Employers are first required to develop an "exposure control plan" that "must be reviewed, updated at least annually or whenever new tasks and procedures affect occupational exposure, made accessible to employees, . . . and made available to [regulatory officials]."[121] Those who handle regulated materials must wear protective equipment, such as plastic gloves, and must receive special training from their employer. Moreover, records must be kept for a minimum of 30 years on each and every employee who handles such materials. Last, employers must offer all affected employees Hepatitis-B vaccinations, which can cost as much as \$250 per employee. Records of the vaccinations must be maintained as well. Those are significant costs to the typical dry cleaner.

Faced with increased costs for handling clothing that has been worn in a medical setting, many dry cleaners have opted to cease handling such materials. Buddy Gritz, owner of Presto Valet in Alexandria, Virginia, no longer accepts lab coats, even for pressing. Given the regulatory requirements, Gritz says, he would have to charge \$6 per coat for pressing alone, just to break even. Some industrial launderers, on the other hand, have experienced a windfall from the regulation, enabling them to challenge their smaller competitors who cannot afford to handle such materials. The bloodborne pathogen regulations, like many others to which the dry-cleaning industry is subjected, will further increase the number of large firms in the industry, at the expense of the smaller mom-and-pop stores that have flourished for decades.

Attacking Employment

Small business is an essential element in job creation. In particular, dry cleaners and other small enterprises provide much-needed employment opportunities for younger and less skilled workers. Government regulation, however, often works against job creation, most directly by inflating the costs of hiring additional labor. Indeed, labor-related costs resulting from federal regulations is among the problems most frequently cited by the owners of small businesses. The cost of health insurance tops the list, and workers' compensation costs and Social Security taxes also make the top ten, according to a survey conducted by the National Federation of Independent Business Foundation.[122] Those problems are of greater concern to owners of small businesses than they were just a few years ago, thanks in no small part to government intervention.[123] Because larger businesses tend to pay their employees well above federally mandated minimums (as well as provide more generous benefit packages), federal labor regulations tend to have a greater impact on small businesses that rely on less expensive labor.[124] Insofar as the federal government increases the cost of labor for small business, employment opportunities in that sector are curtailed.

Perhaps the most obvious government regulation that increases the costs of labor is the federal minimum wage. Currently \$4.25 per hour, the minimum wage is justified on the grounds that it increases the standard of living for low-skilled workers. It is basic economic understanding that increasing the minimum wage results in lower employment levels.[125] The impact is greatest on low-skilled workers, including young adults, part-time or temporary employees, and other individuals entering the labor marketplace for the first time. Without a minimum wage, for instance, employers could pay teenagers low wages to do part-time work after school, on weekends, and the like. Imposing a minimum wage reduces those opportunities.[126]

For the dry-cleaning industry, the issue is of particular importance, and it has been since the initial congressional debate on the Fair Labor Standards Act of 1938. The dry-cleaning industry has opposed increases in the minimum wage since that time. Many dry cleaners rely on unskilled workers as retail clerks and train their own workers. It is also fairly common for dry cleaners to hire students or family members to work at or near the minimum wage. Raising the minimum wage increases the costs of hiring those workers. There are only two possible results of such a policy: (1)

fewer workers are hired as a result of increased costs of employment or (2) dry cleaners are forced to reduce their already low profits even further to absorb the labor costs for essential duties, causing some firms to go out of business. Either way, the employment opportunities offered by the dry-cleaning industry decrease.

There are no data available on the impact of the minimum wage on the dry-cleaning industry, but the experience of other small enterprises is instructive. Economists Lowell Gallaway and Gary M. Anderson report:

When the April 1991 minimum wage law change was instituted, the average hourly wage of service station employees jumped almost 2 percent. When the smoke had cleared from the adjustment process, employment of nonsupervisory workers had fallen by over 10,000.[127]

There is no reason to expect the impact to have been any different on the dry-cleaning industry.

While the minimum wage has an obvious impact on the labor costs of small businesses, many other regulatory requirements, indirectly and thus less recognizably, also inflate the costs of hiring additional workers. The most obvious of those are employment taxes such as employer contributions to Social Security and Medicare under the Federal Insurance Contributions Act and the Federal Unemployment Tax. Employers are also forced to pay state taxes to fund unemployment compensation and workers' compensation programs. On average, companies pay \$9.65 per week--\$501.80 per year--for workers' compensation insurance premiums for each employee. In some states, such as California, the annual cost per worker is over \$750.[128]

Over the past several years, the cost of employment taxes has been rising. From 1987 to 1992, the employment tax burden per worker receiving the minimum wage increased 13.2 percent in real terms. Over the same period, the real increase in wages paid to a worker at that wage was only 7.4 percent. Although policymakers often point to the increase in the minimum wage as one of the most significant job-killing regulations, over the past several years the increase in employment taxes has been even more destructive. Overall, the period 1987 to 1992 saw an increase of 14.7 percent in the cost of hiring the same hypothetical worker.[129]

Additional employment costs are imposed by government regulations mandating that employers provide benefits to employees. Current proposals to require employers to provide health insurance would substantially increase those costs. Often such federal mandates exempt small businesses. The Family and Medical Leave Act of 1992, for example, exempts firms with fewer than 50 employees. Firms with 50 or more employees are required to provide 12 weeks of unpaid parental or family leave. The Americans with Disabilities Act currently exempts firms with fewer than 25 employees. On July 1, 1994, that exemption will be lowered to 15 workers. One dry cleaner in Southern California already covered by the ADA was forced to install a second handicapped-accessible bathroom in his plant when he remodeled, even though he had no handicapped employees. Regulatory requirements such as those contained in the ADA are certain to have a massive impact on small firms.[130]

The exemption for small businesses certainly means that most dry cleaners are unaffected by such mandates. However, as firms grow and hire more employees, they risk being subject to expensive federal benefits requirements. An increasing number of dry cleaners are operated by larger chains that grew out of small operations. Many other dry-cleaning outlets are merely drop-off points; the actual cleaning is done at a plant nearby that may employ 50 or more people.

According to the Small Business Administration, a typical employer bears almost \$2,000 in costs each time an employee elects to use the full 12 weeks of family leave that are available.[131] Calculations by Gary Anderson and Lowell Gallaway of the minority staff of the Joint Economic Committee of Congress indicate that that relatively small cost alone will encourage many firms employing close to 50 workers to employ fewer rather than more. Using the example of a hypothetical firm with 60 workers, Anderson and Gallaway calculated that the costs of having five workers take 12 weeks of family leave can exceed the total profit generated by the last 11 workers hired. In that situation, a profit-maximizing firm will opt not to hire additional workers if the marginal labor costs exceed the marginal profit generated. The inevitable result is that "having the medical and family leave coverage go into effect only when a firm has at least 50 employees will have the effect of creating a large number of small businesses with exactly 49 workers." [132] As one California dry cleaner noted during an interview, the "potential for creating jobs has become more of a liability than an asset."

Conclusion

During the 1992 presidential campaign, Bill Clinton proclaimed that "expanding regulations threaten to overwhelm the nation's entrepreneurs and divert them from the task of building strong, innovative companies." [133] In recent surveys of mid-sized manufacturing companies, lighter regulation topped the list of executive concerns. [134] To date, the rising regulatory tide shows little signs of retreating. The Wall Street Journal recently reported that "the paperwork is getting worse, the laws more onerous and the rules more complicated. . . . The cost of compliance is increasing, diverting precious time and money from making a product or providing a service." [135] If dry cleaners and small businesses in general are going to receive regulatory relief, there is no indication of it thus far.

The problem is not so much with any specific regulation as it is with the overall phenomenon. Regulatory officials, political staffs, and members of public-interest organizations could all point to the important concerns that these and other regulations seek to address. The problem is in the assumption that additional regulations--additional layers of red tape--are the solution to all problems of environmental pollution, workplace safety, labor-management relations, and the like. That presumption is not only unwarranted; it is ultimately destructive as well.

The cumulative impact of regulatory efforts is to depress economic activity, retard job creation, and stifle the entrepreneurial spirit. When regulations are issued with little regard for their marginal impact when added to existing requirements, their results can be particularly oppressive. Regulations are like straws that eventually break the camel's back.

The solution for some regulatory burdens is to exempt small businesses. Thus, the Americans with Disabilities Act and the Family and Medical Leave Act of 1992 exempt firms with few employees. Although that may provide a reprieve for the smallest businesses, it also creates a penalty for business growth. When a dry cleaner grows enough that his or her plant renovations must include the addition of a second handicapped-accessible restroom even though there are no handicapped employees, the incentives against business growth--indeed, against success--are clear. If the regulation truly serves an important public good, such as protecting workers, why are all workers not protected? More to the point, if the costs imposed by the regulations are excessive compared with their benefits, why should any business be forced to comply? The problem is with the pro-regulation mentality that persuades the political elite. The plight of small business is merely one of the more distressing symptoms.

The importance of small business lies in its ability to expand economic opportunity for all Americans. Insofar as small-business men and women must spend their time filling out permit applications and jumping through regulatory hoops, they are diverted from those activities that lead to the creation of wealth and expand the economic pie. Such a diversion of creative energies is in no one's interest.

It is not enough that regulations be based on good intentions. It is necessary to gauge their impact--economic and otherwise--on those who will be forced to live under them. To date, efforts along those lines have been meager at best. The EPA proposed emission regulations and then discovered that many options existed of which the agency had been unaware. OSHA imposed workplace exposure standards that have little basis in scientific fact. Rarely are such regulations imposed as a result of defined problems that clearly require correction. Instead, there is a presumption that anything that poses a potential or theoretical risk must be regulated now, lest a problem result later.

Regulations are two-edged swords. They may protect employees, but they result in the employment of fewer people. They may seek to protect public health, but the resulting loss in economic productivity can itself reduce the quality of life and even result in an increase in mortality rates. It is time that regulatory activities were subjected to the same level of scrutiny as the business practices those regulations are designed to address. The economic future of this country--and the entrepreneurs upon whom it will depend--requires no less.

Notes

[1] Process waste in a dry-cleaning facility consists of dirt, lint, and soil removed from clothing and the spent filter used to keep the solvent clean. That waste is classified as "hazardous" by the federal government because it contains trace amounts of dry-cleaning solvents, typically perchloroethylene.

- [2] "Teasdale Fenton Files Chapter 11: Environmental Laws Called Major Factor," Cincinnati Enquirer, October 8, 1992, p. B6.
- [3] Quoted in Dave Johnston, "Permit Hearing Finds Sympathy," Drycleaners News, February 1993.
- [4] Environmental Protection Agency, Office of Policy Planning and Evaluation, The Small Business Sector Study: Impacts of Environmental Regulations on Small Business, EPA 230-09/88-039 (Washington: EPA, September 1988), table G-3.
- [5] Lowell Gallaway and Gary Anderson, Derailing the Small Business Job Express (Washington: U.S. Congress, Joint Economic Committee, Republican staff, November 7, 1992), table 2.
- [6] 48 Federal Register 49097 (October 24, 1983)
- .
- [7] Cost figures from the Texas Laundry and Dry Cleaning Association, June 1, 1993.
- [8] "Dry Cleaner Gets Bill for Cleaner Air," St. Louis Business Journal, August 24, 1992, p. 1.
- [9] Kenneth Chilton and Murray Weidenbaum, "Government Regulation: The Small Business Burden," Journal of Small Business Management, January 1982, p. 4.
- [10] Environmental Protection Agency, The Small Business Sector Study, p. 1-1.
- [11] B. Peter Pashigian, "How Large and Small Plants Fare under Environmental Regulation," Regulation, September-October 1983, p. 23.
- [12] Ann R. Klee, "Small-Business Woes," Legal Times--Special Report: Protecting the Heavens and the Earth, May 31, 1993, p. 15.
- [13] Quoted in Bill Hobbs, "Dry Cleaning Industry Braces for Clean Air Act," Nashville Business Journal, November 4, 1991.
- [14] Environmental Protection Agency, The Small Business Sector Study, p. 3-8.
- [15] Letter from Mary Scalco, government affairs manager, International Fabricare Institute, March 4, 1993.
- [16] Gallaway and Anderson, Derailing the Small Business Job Express, table 7. Some employees are likely to be part-time.
- [17] Environmental Protection Agency, Office of Policy Planning and Evaluation, Municipalities, Small Business, and Agriculture: The Challenge of Meeting Environmental Responsibilities, EPA 230-09/88-037 (Washington: EPA, September 1988), p. 3-3.
- [18] Gallaway and Anderson, Derailing the Small Business Job Express, table 7.
- [19] Terry Burns, Letter to the editor of Money magazine, cited in "Getting Their Money's Worth--Money Magazine Hears an Earful about Its Article," National Clothesline, May 1992, p. 54.
- [20] International Fabricare Institute.
- [21] Environmental Protection Agency, "1991 Hazardous Waste Report: Instructions and Forms," EPA Form 8700-13A/B (5-80).

- [22] Tom Matrullo, "They Fear New Rules Will Take Them to the Cleaners," *Newsday*, City edition, August 21, 1989, p. 2.
- [23] Small Business Administration, *The State of Small Business: A Report of the President* (Washington: Government Printing Office, 1989), p. 48.
- [24] Gallaway and Anderson, *Derailing the Small Business Job Express*, p. 1.
- [25] *Ibid.*
- [26] William G. Laffer III, "How Regulation Is Destroying American Jobs," Backgrounder no. 926, Heritage Foundation, Washington, February 16, 1993, p. 10.
- [27] Adam Lashinsky, "Wrinkle for Dry Cleaners: Tough New Pollution Regs," *Crain's Chicago Business*, October 26, 1992.
- [28] Matrullo.
- [29] *Ibid.*
- [30] Environmental Protection Agency, *The Small Business Sector Study*, p. 3-7.
- [31] Edna Michelsen, *Remembering the Years--1907-1957* (Silver Spring, Md.: National Institute of Drycleaning, 1957), p. 1.
- [32] *Ibid.*, p. 26.
- [33] "IFI's Equipment and Plant Operations Survey," *Focus on Drycleaning* 13, no. 1 (March 1989): 2.
- [34] International Fabricare Institute, *The Facts on Perc* (Silver Spring, Md: IFI, November 1992).
- [35] Quoted in Matrullo.
- [36] The EPA Science Advisory Board explained: "We do not consider the evidence strong enough to classify this compound as a probable human carcinogen; on the other hand, the evidence for carcinogenicity is stronger than for most other compounds classified as possible human carcinogens. . . . Our best judgment places this compound on a continuum between these two categories." Letter to EPA administrator William K. Reilly from Dr. Raymond Loehr, chairman, EPA Science Advisory Board, and Dr. Bernard Weiss, acting chairman, Environmental Health Committee, August 16, 1991.
- [37] "This 'Perc' Isn't a Benefit," *Consumer Reports*, September 1992, p. 559.
- [38] Mary Beth Pfeiffer, "The Enemy Below," *New York Times*, September 5, 1992, p. 19.
- [39] "Dry Cleaning--Hidden Hazards," *Greenpeace International*, undated.
- [40] See Joe Thornton, *The Product Is the Poison: The Case for a Chlorine Phase-out* (Washington: Greenpeace USA, 1991); and Beverly Thorpe, "Chlorinated Solvents: Time for a Global Ban," *Industry and the Environment*, Fall 1991.
- [41] In an undated Greenpeace USA brief "Dry Cleaning--Hidden Hazards," consumers are told to "complain about 'dry clean only' labels when buying clothes in the shop." It also concludes that "attention should now focus on finding alternatives to chemical dry cleaning."
- [42] It should be noted that the EPA has encouraged the phaseout of perc before. In the 1970s the EPA and others recommended that perc be replaced with "solvent 113," a chlorofluorocarbon (CFC). Since that time, an international phaseout of the use and production of CFCs has been implemented. Had the advice been taken, dry cleaners would

now face considerable expense replacing solvent 113 and the machinery its use requires.

[43] According to data from the National Institute of Occupational Safety and Health, prior to 1983 people operating dry-cleaning machines were exposed to average levels of 30 ppm, while most other workers are exposed to levels below 10 ppm. Given advances in machine technology since that time, typical exposures are likely to be significantly lower to day. Cited in D. Warner North, "Decision Analysis in Environmental Risk Management: Applications to Acid Deposition and Air Toxics," in *New Risks*, ed. L. A. Cox, Jr., and P. F. Ricci (New York: Plenum, 1990), pp. 38-39.

[44] National Cancer Institute, *Bioassay of Tetrachloroethylene for Possible Carcinogenicity*, Carcinogenesis Technical Report Series, no. 13 (Washington: National Institutes of Health, 1977).

[45] Cited in 54 Federal Register 2686 (January 19, 1989).

[46] The Dow study is cited in David P. Brown and Samuel D. Kaplan, "Retrospective Cohort Mortality Study of Dry Cleaner Workers Using Perchloroethylene," *Journal of Occupational Medicine* 29, no. 6 (1987): 535. On other studies, see British Columbia Fabricare Association, "Comment on Draft Amendment for New Permissible Concentration for Perchloroethylene," submitted to the Secretariat for Regulation Review, Board of Governors, Workers' Compensation Board of British Columbia, May 1993, table 1.

[47] Bruce N. Ames, Renae Magaw, and Lois Swirsky Gold, "Ranking Possible Carcinogenic Hazards," *Science*, April 17, 1987, reprinted in *Readings in Risk*, ed. T. S. Glickman and M. Gough (Washington: Resources for the Future, 1990), p. 82.

[48] Lois Swirsky Gold et al., "Rodent Carcinogens: Setting Priorities," *Science*, October 9, 1992, p. 261.

[49] For a general discussion of the topic, see Michael Fumento, *Science under Siege: Balancing Technology and the Environment* (New York: William Morrow, 1993), especially chaps. 1-3.

[50] Gold et al., p. 264.

[51] *Ibid.*, p. 263.

[52] EPA's permissible standard for perc in groundwater is 5 parts per billion.

[53] Cited in North, pp. 38-39.

[54] Brown and Kaplan; Blair et al., "Causes of Death among Laundry and Dry Cleaning Workers," *American Journal of Public Health* 69 (1968): 508-11; Katz et al., "Female Laundry and Dry Cleaning Workers in Wisconsin: A Mortality Analysis," *American Journal of Public Health* 71 (1981): 305-7; Duh et al., "Mortality among Laundry and Dry Cleaning Workers in Oklahoma," *American Journal of Public Health* 74 (1984): 1278-80; and Blair et al., "Cancer and Other Causes of Death among a Cohort of Dry Cleaners," *British Journal of Industrial Medicine* 47 (1990): 162-68.

[55] Brown and Kaplan.

[56] Blair et al., "Cancer and Other Causes of Death," p. 167, citing evidence in T. D. Sterling and J. J. Weinkam, "Smoking Characteristics by Type of Employment," *Journal of Occupational Medicine* 18 (1976): 743-54; and J. Walrath et al., *Mortality Patterns among U.S. Veterans by Occupation and Smoking Status*, NIH Publication no. 85-2756, vol. 1 (Bethesda, Md.: U.S. Department of Health and Human Services, 1985).

[57] Letter to EPA Administrator William K. Reilly from Dr. Raymond Loehr, chairman, EPA Science Advisory Board, and Dr. Bernard Weiss, acting chairman, Environmental Health Committee, August 16, 1991.

[58] 54 Federal Register, 2686 (January 19, 1989).

[59] International Fabricare Institute, et al., v. OSHA, 964 F.2d 962, 971, and 980 (1992).

[60] Ibid. at 982.

[61] At the time of this writing, Sen. Ted Kennedy (D-Mass.) and others have proposed codifying the remanded OSHA standards through legislation.

[62] Those states are Alaska, Arizona, California, Connecticut, Hawaii, Maryland, Michigan, Minnesota, New Mexico, Vermont, Virginia, and Washington. The Virgin Islands has also decided to maintain the more stringent standard.

[63] Based on \$10,000 average profit from Gallaway and Anderson, Derailing the Small Business Job Express, table 7.

[64] Adam Lashinsky, "Wrinkle for Dry Cleaners: Tough New Pollution Regs," Chicago Tribune, October 26, 1992.

[65] Environmental Protection Agency, Office of Air Quality Planning and Standards, "National Emission Standards for Hazardous Air Pollutants from Perchloroethylene Dry Cleaning Facilities--Final Rule: Fact Sheet," September 14, 1993.

[66] Lydia Wegman, "Air Toxics: The Strategy," EPA Journal, January-February 1991, p. 32.

[67] That is the estimate of the Council of Economic Advisors, cited in Wegman, p. 33.

[68] Cited in Frederick H. Rueter and Wilbur A. Steger, "Air Toxics and Public Health: Exaggerating Risk and Misdirecting Policy," Regulation 13, no. 1 (Winter 1990): 55.

[69] Michael Gough, "How Much Cancer Can EPA Regulate Away?" Risk Analysis 10, no. 1 (1990): table 2.

[70] The conservative approach to the risks posed by hazardous air pollutants is outlined in Rueter and Steger.

[71] It is also the case that where control technologies are not available, yet health concerns do exist, the EPA typically requires the most stringent control method available.

[72] 57 Federal Register 45364 (October 1, 1992).

[73] Ibid.

[74] Ibid.

[75] 58 Federal Register 49354 (September 22, 1993).

[76] 57 Federal Register 45364 (October 1, 1992).

[77] 58 Federal Register 49354 (September 22, 1993).

[78] Richard Miniter, "Is Dry Cleaning a Health Hazard?" City Journal, Summer 1993, p. 12.

[79] 56 Federal Register 64387 (December 9, 1991).

[80] 57 Federal Register 45364 (October 1, 1992).

[81] 48 Federal Register 49097 (October 24, 1983). For some reason, the EPA proposed that change yet never made it final or formally withdrew the proposal. That caused one official of the International Fabricare Institute to remark that the proposal "has been in permanent limbo." Clean Air Report, August 1, 1991, p. 16.

[82] 56 Federal Register 64382 (December 9, 1991).

[83] Undated letter from David Todd, staff attorney, Texas Air Control Board, in response to Charles Davies, executive director, Texas Laundry and Drycleaning Association, letter of September 1, 1992.

[84] Letter from Michael R. Lake, chief of Engineering Division, Air Pollution Control District, County of San Diego, January 8, 1992, to George Smith, Emissions Standards Division, EPA.

[85] "NRDC Attacks EPA Proposal to Delist Perchloroethylene as Smog Producer," Air Water Pollution Report, January 11, 1993.

[86] Interestingly enough, even though cartridges are classified as hazardous wastes, they are not prone to emitting their perc contents. Indeed, if anything they will absorb liquid chemicals with which they come into direct contact.

[87] Environmental Protection Agency, Office of Solid Waste and Emergency Response, The Nation's Hazardous Waste Management Program at a Crossroads: The RCRA Implementation Study (Washington: EPA, July 1990), p. 36.

[88] Ibid., p. 47.

[89] Quoted in Matrullo.

[90] Environmental Protection Agency, "1991 Hazardous Waste Report."

[91] This figure is taken from Santa Barbara County, California, and includes the permit fee, in addition to the cost of filing a Hazardous Waste Business Plan. The figure does not include the cost of the labor time expended on compliance.

[92] Warren Brookes, "Wreaking Havoc with Waste Disposal," Washington Times, April 1, 1991, p. D1.

[93] Philip H. Abelson, "Remediation of Hazardous Waste Sites," Science, February 21, 1992, p. 901.

[94] Some people have argued that it is completely irrational for a society to spend billions of dollars on marginal health and safety regulations when more good could be accomplished through the provision of health care and other goods. See, for example, Indur Goklany, "Rationing Health Care While Writing Blank Checks for Environmental Health Hazards," Regulation 15, no. 3 (Summer 1992): 14-15.

[95] For a survey of the literature on this subject, see Daniel Mitchell, "The Deadly Impact of Federal Regulations," Journal of Regulation and Social Costs (June 1992); and Aaron Wildavsky, Searching for Safety (New Brunswick, N.J.: Transaction Books, 1988).

[96] In economics this faulty perception is typically referred to as the "broken window fallacy." For a concise discussion, see Henry Hazlitt, Economics in One Lesson (New York: Crown Publishing, 1946), especially pp. 15-30.

[97] Mitchell.

[98] Bruce Yandle, The Political Limits of Environmental Regulation: Tracking the Unicorn (New York: Quorum Books, 1989), p. 113.

[99] William D. Wick, "Courts Still Find CERCLA Liability Everywhere," Environmental Law Supplement to San Francisco Daily Journal, May 27, 1993, p. 18.

[100] Yandle, p. 113.

[101] Katherine N. Probst and Paul R. Portney, Assigning Liability for Superfund Cleanups: An Analysis of Policy Options (Washington: Resources for the Future, June 1992), p. 9.

[102] Ted Williams, "The Sabotage of Superfund," Audubon, July-August 1993, p. 34.

[103] Peter Huber, "Environmental Hazards and Liability Law," in *Liability: Perspectives and Policy*, ed. R. Litan and C. Winston (Washington: Brookings Institution, 1988), pp. 140-41.

[104] Letter to IFI membership, *Fabricare News*, September 1993, p. 3.

[105] Huber, p. 140.

[106] For sites listed on the Superfund National Priorities List, the cost is even higher, averaging over \$30 million per site, according to Kenneth S. Abraham, "Solving the Insurance Liability Crisis," *Special Report: Protecting the Heavens and the Earth*, *Legal Times*, May 31, 1993, p. 31.

[107] "Superfund Liability Can Kill a Business," *Drycleaners News*, March 1993, p. 17.

[108] Mary Scalco and Jon Meijer, "Government Affairs Update: Drycleaners' Leases Not Renewed," *Fabricare News*, February 1993, p. 5.

[109] Jessica Davis-O'Hay, "Environment Concerns Make Some Mall Owners Hesitate on Drycleaners' Leases," *National Clothesline*, January 1993, pp. 1, 17.

[110] Yandle, p. 114.

[111] "The most common reaction of insurers to such uncertainty has simply been to exclude all pollution liability coverage--sudden, accidental, gradual, or otherwise. Most have now concluded that links between pollution and damage are so highly speculative, at least in the courts, that policies cannot be rationally priced." Huber, p. 146.

[112] See Yandle, p. 115.

[113] Virginia Department of Labor and Industry, Occupational Safety and Health Program, Citation and Notification of Penalty, Inspection no. 112378377, Optional Report 015-91, April 28, 1992 (in the author's files).

[114] Mary Scalco and Jon Meijer, "Government Affairs Update: OSHA's Motor Vehicle Safety Rule Postponed," *Fabricare News*, March 1993, p. 3.

[115] Office of Management and Budget, *Regulatory Program of the United States Government* (Washington: OMB, 1991), table C-2.

[116] Equipment cost estimates taken from Lab Safety Supply, *Personal and Environmental Safety--1993 General Catalog*, Spring-Summer edition.

[117] A recent audit of congressional offices found a similar pattern of noncompliance. The study, conducted by the General Accounting Office, found 140 violations of OSHA regulations, 52 of which qualified as "serious" by OSHA standards. Minority staff members of the House Education and Labor Committee calculated that Congress would be liable for \$980,000 in fines were it subject to the regulations. "\$1 Million in OSHA Fines, If the Rules Applied to U.S.," *National Clothesline*, November 1992, p. 72.

[118] "Some business managers and owners refused to go 'on the record' with their complaints for fear of 'reprisal' from government regulators." Gordon Bishop, "Firms in New Jersey Bemoan High Hurdle of Taxes, Regulation," *Star-Ledger*, June 20, 1993.

[119] For a brief discussion of the potential for arbitrary enforcement of environmental regulation, see Jonathan H. Adler, *Hazardous Waste Regulation in South Carolina* (Columbia, S.C.: South Carolina Policy Council, 1992), p. 12.

[120] 59 *Federal Register*, 64175-82 (December 6, 1991).

[121] Occupational Health and Safety Administration, "Occupational Exposure to Bloodborne Pathogens," OSHA 3127, 1992, p. 4.

[122] William J. Dennis, Jr., *Small Business Problems and Priorities* (Washington: NFIB Foundation, 1992), p. 9.

[123] Dennis, p. 25.

[124] Laffer, p. 8.

[125] For recent work on the subject, see David Neumark, "Employment Effects of Minimum and Subminimum Wages: Recent Evidence" (Washington: Employment Policies Institute, February 1993); and Richard K. Vedder and Lowell E. Gallaway, *Out of Work: Unemployment and Government in Twentieth-Century America* (New York: Holmes & Meier, 1993).

[126] For recent evidence of that, see Alan Reynolds, "Cruel Costs of the 1991 Minimum Wage," *Wall Street Journal*, July 7, 1992, p. A14.

[127] Lowell Gallaway and Gary Anderson, "The Impact of Recent Federal Regulations on Small Business Job Creation," *Journal of Regulation and Social Costs*, March 1993, p. 42.

[128] Charles Oliver, "Killing Jobs, California-Style: High Taxes, Regulations Send Businesses Fleeing," *Investor's Business Daily*, June 17, 1993, p. 1.

[129] Gallaway and Anderson, *Derailing the Small Business Express*, table 5, p. 13.

[130] As are many other regulations, these regulations are likely to have a disproportionate impact on smaller firms. Gallaway and Anderson, "The Impact of Recent Federal Regulations," p. 48.

[131] Cited in Gallaway and Anderson, *Derailing the Small Business Job Express*, p. 21.

[132] *Ibid.*, p. 23.

[133] Clinton and Gore on small business and entrepreneurship, cited in Kim Holmes, "Scorecard on Clinton's First 100 Days," *Backgrounder* no. 937, Heritage Foundation, April 29, 1993, p. 14.

[134] Brent Bowers, "Regulation Play: Avoiding the Pitfalls," *Wall Street Journal*, October 15, 1993, p. R16.

[135] *Ibid.*