

'Clean Air' Act spells catastrophe for industry and future prosperity

by Rogelio A. Maduro

Under the leadership of Sen. George Mitchell (D-Me.), a self-proclaimed radical environmentalist, the U.S. Senate is putting together the final details of amendments to the Clean Air Act by the end of March. Exactly what kind of monster will emerge is quite uncertain, since all the debate has been held behind closed doors, but the Clean Air Act as presently conceived will destroy the economy of the United States, as industry leaders warn of the coming "catastrophe."

A new study shows that under the Senate version of the bill, some 750,000 workers will lose their jobs, and as many as 3.7 million workers will be directly affected. **Figure 1** shows the number of jobs to be lost per county. Thousands of businesses will just have to shut down, either being technically unable to meet the insanely stringent standards of the bill, or simply not being able to afford them. New entrepreneurial industry won't open because of the extremely restrictive permit requirements. Over 1,450 counties across the United States will be severely affected by just one provision of the bill (**Figure 2**).

According to the Business Roundtable, the cost of the various Clean Air Act amendments being considered by Congress could range from a "best estimate" of \$54 billion to as much as \$104 billion per year in the case of the Senate legislation being debated. The study, released in January, warned the result might be a "shutdown of industries," or "significantly reduced production in United States industries."

Those enormous costs are not the full story. The Business Roundtable study only examines the costs of complying with just three provisions of the amendments to the Clean Air bill, and does not take into account the costs of complying with the existing 1970 "Clean Air" and 1972 "Clean Water" Acts. Environmental Protection Administration officials estimate that for 1989 those costs amounted to over \$91 billion a year. Further, EPA and Department of Commerce figures reveal that complying with these acts has cost the U.S. economy over \$1.2 trillion in the past 20 years (**Figure 3**).

The news media love to complain about \$1,200 hammers and \$600 toilet seats in the military, but have turned a blind eye to the scandal of what this staggering \$1.2 trillion has been used for. Environmental zealots rant and rave that it hasn't bought "Clean Air" and "Clean Water," which is the

reason the amendments to the act are allegedly needed. In fact, the redirection of \$1.2 trillion in resources from productive investment into useless environmental regulation has wrought great misery, hunger, and unemployment. It has drained all the resources that industry would have otherwise invested into modern production technologies which do not pollute, such as plasma torches and magnetohydrodynamic generators, into scrubbers and other gadgets. At the state and local level, the environmental regulations have drained most of the resources that would have been used to maintain and upgrade basic infrastructure, such as bridges, roads, and railroads.

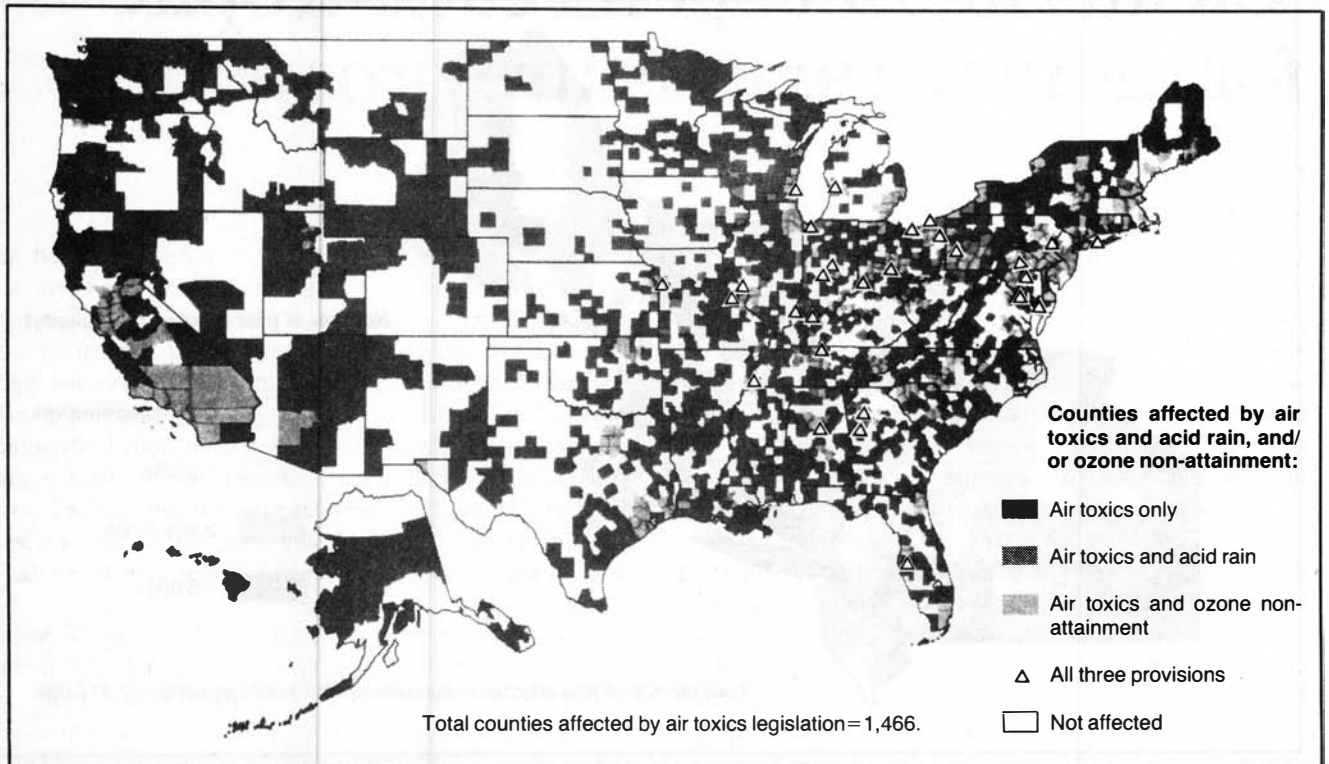
The critical question is, who benefits? Looking five years down the line from the adoption of the amendments to the Clean Air Act, what we will see in the United States is essentially a corporatist society, in which the environmental regulations have driven most small and medium-sized businesses and industries out of business, and what's left is the giant cartels who have the resources to hire hundreds of lawyers to defend themselves and pay for all the monitoring and pollution abatement equipment. A large corporation can afford to pay \$250,000 for a piece of pollution abatement equipment, yet that cost will drive smaller producers (the competition), out of business. As documented in previous issues of *EIR*, the Du Pont Corporation, under the new ownership of Edgar Bronfman's Seagrams Whiskey Distillers, has made it an official policy to be a "corporate environmentalist."

The enforcement provisions in the bills officially create an ecological police state in which constitutional due process is disregarded. Faceless bureaucrats from EPA and state agencies will have the power to mandate exorbitant penalties and long prison terms to companies and individuals for as little as a mistake in filling out a form. They can reject operating permits, closing plants. Who's to say EPA officials can't be bribed by a giant corporation into denying operating permits to the competition?

The new power elite in this country, the professional environmentalists, will definitely benefit. Filed tax returns show that the 100 largest environmental groups reported a collective income of over \$3 billion in 1988. The Natural Resources Defense Council, Environmental Defense Fund,

FIGURE 1

Counties affected by the Clean Air Act Amendment*



*Title 3, Air Toxics: Full compliance with Maximum Achievable Control Technology and 1 in 1 million residual risk requirement. Source: CONSAD Research Corp.

As documented in the study, as much as one-third of the counties affected are already facing unemployment rates of 10% and higher, adding hundreds of thousands of workers to unemployment lines. This map reflects only one title of the Clean Air bill. The full bill has seven titles, each with a devastating effect on the economy.

MACT stands for Maximum Achievable Control Technology, which means that 98% of U.S. plants will have to install within a very short period of time the most advanced pollution control gadgets in existence, or close.

The requirement for a "1 in 1 million residual risk" means that an individual, defined as a "maximum exposed individual," living for 70 uninterrupted years subjected to the highest amount of pollutants released by a hypothetical source cannot run a greater risk of contracting cancer than 1 in 1 million. Plants that cannot meet this standard must close. This today threatens 750,000 Americans with job loss.

National Wildlife Federation, Greenpeace, Nature Conservancy, the Sierra Club all have luxurious offices. Many of their staff drive their expensive cars daily though neighborhoods where thousands of people have become unemployed and driven into untold misery as a result of environmental policies.

Moreover, it would be quite wrong to assume that all businesses and corporations are against the radical environmental measures now being made into law in Washington. As a matter of fact many of the giant corporations are actively supporting such measures. There are huge profits to be made from environmental legislation, if one doesn't care about the welfare of human beings. There are tens of billions to be made on all the pollution

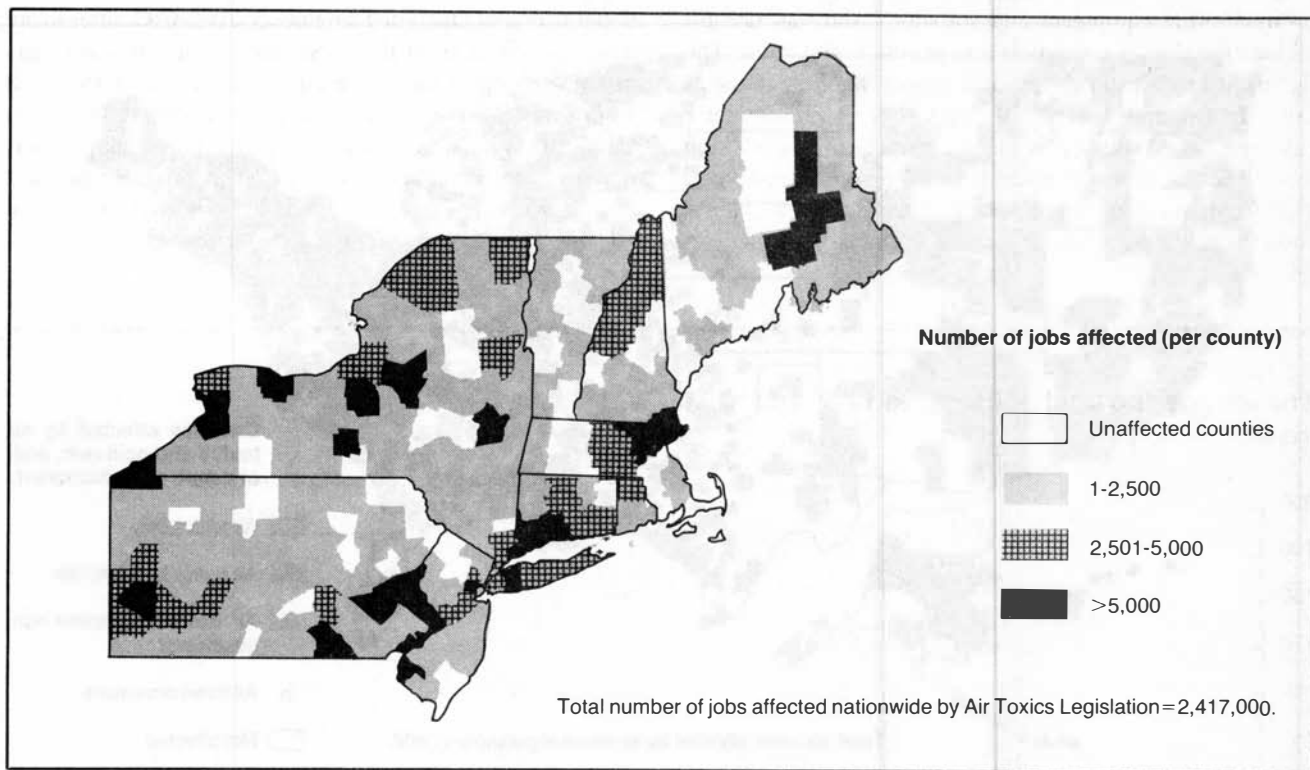
abatement equipment, new patented chemicals to replace those being banned, and merchandise which can be sold to credulous consumers as environmentally "benign" goods. Land trusts, owned and controlled by America's leading "blueblood" families, gain them enormous wealth from real estate value and in tax-breaks. As pointed out previously, small and medium-sized businesses and industries will be the ones that go out of business, eliminating the competition.

A 'catastrophic' loss of jobs

On Feb. 27, the Clean Air Working Group gave a dramatic press conference releasing the first detailed study which examined the consequences to jobs from environmental regu-

FIGURE 2

Number of jobs affected in the Northeast by the Clean Air Act Amendment*



*Title 3, Air Toxics: Full compliance with Maximum Achievable Control Technology and 1 in 1 million residual risk requirement.
Source: CONSAD Research Corp.

lations. The study, *An Analysis of Jobs-at-Risk and Job Losses Resulting from the Proposed Clean Air Act Amendments*, was conducted by the CONSAD Research Corporation, a think-tank which tries to achieve a balanced public policy. The authors, Robert Hahn, associate professor of economics and public policy at Carnegie Mellon University, and Wilbur Steger, adjunct professor of public policy and president of CONSAD Research, defined adverse employment impacts as loss of jobs, prolonged layoffs, and reductions in wages or hours.

Addressing the press conference, William Fay, administrator of the Clean Air Working Group, warned that “the impact will be dramatic, and I know some will say catastrophic. The bottom line is this: Between 3 and 4 million jobs will be adversely affected. At the very least, more than 200,000 jobs will be eliminated . . . and the number could be as high as 750,000 . . . jobs lost . . . wiped out. Other workers could have their benefits and hours cut, wages reduced, or they could be laid off—some for extended periods of time.”

Fay continued, “Moreover, these job effects could be felt in nearly half the nation’s 3,100 counties where 7 out of 8 people live and work. No area of the country could escape feeling some impact. No industrial sector. Members of Con-

gress will find this study hard to ignore. It’s difficult to imagine legislators voting for a bill that would guarantee their constituents a place in the unemployment line.”

The consequences may be much greater, however. Fay, whose group represents over 1,850 businesses and industries, indicated, “This study examines the effects of amendments to just three of the Clean Air Act’s major sections, so it represents a conservative estimate of how businesses—small and large—will react to greatly increased costs. In reality, job losses will have a ripple effect throughout the economy. When the multiplier is considered, it is clear that many more jobs will be at risk.”

“We’re not talking in the abstract here.” Fay interjected, “We’re talking about the auto worker in Ohio. The chemical worker in New Jersey. A coal miner in Kentucky. The local baker and the dry cleaner on Main Street. The real backbone of the nation’s economy is the worker who has a job to come home from today and go back to tomorrow. This study shows that part of the nation’s heavy industry would not be able to compete in world markets if required to conform to the strictest requirements. In some cases, the technology to adhere to the most stringent codes simply doesn’t exist.”

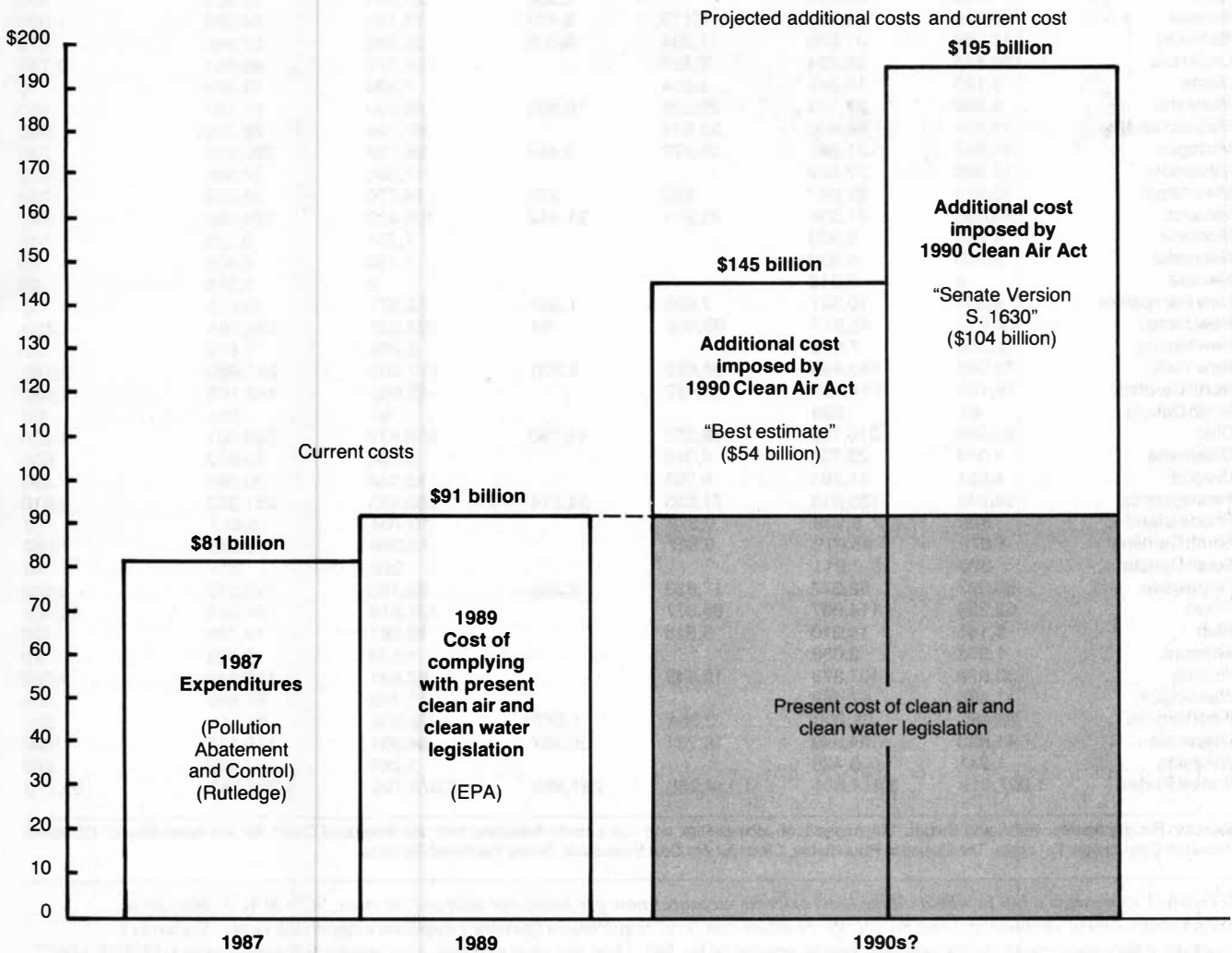
The Clean Air legislation will also affect small business-

es, according to Fay. He said that "the average small business will incur \$15,000 in expenses related to obtaining mandatory permits. . . . Dry cleaners, printers, auto body shops and others would be required to spend from \$50,000 to \$250,000 on monitoring equipment and software. And that doesn't include the cost of computers and people to run them. The figures just won't add up for some people. Industry statistics show, for example, that half of all dry cleaners in the country have less than \$100,000 in annual receipts. It doesn't stop there. The cost to small businesses will be even more severe. With venture capital funds less abundant and new, higher costs to control pollution, fewer new businesses are likely to

start up. Fewer new businesses means fewer new jobs."

Although Fay's remarks were startling, the most dramatic statements at the press conference were given by a trade unionist. John Brown, the legislative director of the International Union of Operating Engineers, AFL-CIO, after many inane questions from the press interjected, "It wasn't too many years ago I ran into a guy by the name of Ron Dell whose opinion I happen to admire. He said if 10,000 in California applied for one job, now, the important part was not that one person received the job. The important part was that 9,999 people were out of work. Does anybody in here realize what a job loss is if you've got yourself a family, if

FIGURE 3
The staggering cost of the 'Clean Air' and 'Clean Water' hoax
 (billion \$)



The graph shows the yearly cost of complying with the 1970 Clean Air and 1972 Clean Water legislation plus added cost of implementing just three provisions in the 1990 Clean Air Act (the total cost would be much greater).

TABLE 1

Jobs-at-risk and job losses resulting from proposed Clean Air Act amendments

State	All plants affected by air toxics provisions		Permitting small bus.	Acid Rain	Scenario 1 + permits + acid rain	Scenario 9 + permits + acid rain	Costs (best estimate) (\$ millions)
	Scenario 1	Scenario 9					
Alabama	31,778	56,412	9,438	4,890	46,106	70,740	1,350
Alaska	3,251	4,786			3,251	4,786	10
Arizona	8,326	12,059	14,520		22,846	26,579	23
Arkansas	9,098	14,141	156		9,254	14,297	36
California	29,659	132,991	210,243		239,902	343,234	11,000
Colorado	7,612	20,090			7,612	20,090	80
Connecticut	18,838	30,691	20,637		39,475	51,328	420
Delaware	2,637	14,872	4,580		7,217	19,452	150
Dist. of Col.	50	250			50	250	20
Florida	14,118	29,619	30,781	7,599	52,498	67,999	490
Georgia	18,289	51,433	22,019	6,329	46,637	79,781	960
Hawaii	3,055	5,254			3,055	5,254	50
Idaho	675	2,791			675	2,791	20
Illinois	54,668	109,660	79,707	6,250	140,625	195,617	2,670
Indiana	81,136	155,798	16,788	28,559	126,483	201,145	1,320
Iowa	14,949	26,373		6,932	21,881	33,305	170
Kansas	3,594	19,531	6,110	8,427	18,131	34,068	1,000
Kentucky	16,559	37,506	11,334	9,000	36,893	57,840	570
Louisiana	26,619	38,894	7,757		34,376	46,651	2,740
Maine	3,185	10,245	4,214		7,399	14,459	70
Maryland	8,002	27,169	29,526	10,502	48,030	67,197	480
Massachusetts	13,424	24,446	53,874		67,298	78,320	990
Michigan	46,992	181,083	36,272	3,464	86,728	220,819	720
Minnesota	17,890	27,599			17,890	27,599	420
Mississippi	13,813	27,082	685	272	14,770	28,039	280
Missouri	58,066	87,336	25,914	21,442	105,422	134,692	1,880
Montana	1,261	3,923			1,261	3,923	130
Nebraska	3,750	6,820			3,750	6,820	20
Nevada	0	2,316			0	2,316	20
New Hampshire	4,339	10,621	7,605	1,387	13,331	19,613	10
New Jersey	12,510	43,817	90,458	69	103,037	134,344	1,450
New Mexico	2,209	7,413			2,209	7,413	50
New York	70,083	140,458	98,652	8,570	177,305	247,680	2,140
North Carolina	16,135	114,736	27,427		43,562	142,163	1,120
North Dakota	61	635			61	635	60
Ohio	92,346	210,170	69,351	46,780	208,477	326,301	1,620
Oklahoma	4,044	23,703	4,346		8,390	28,049	430
Oregon	4,651	11,591	8,703		13,354	20,294	260
Pennsylvania	54,246	135,015	71,533	24,714	150,493	231,262	1,910
Rhode Island	826	5,939	9,878		10,704	15,817	70
South Carolina	4,672	45,619	9,627		14,299	55,246	250
South Dakota	320	811			320	811	40
Tennessee	69,027	92,377	17,833	8,305	95,165	118,515	2,040
Texas	62,239	114,967	69,377		131,616	184,344	10,460
Utah	8,145	14,210	5,516		13,661	19,726	180
Vermont	1,573	2,038			1,573	2,038	20
Virginia	33,979	107,378	19,642		53,621	127,020	1,060
Washington	11,468	67,469			11,468	67,469	660
West Virginia	20,485	31,290	2,854	1,967	25,306	36,111	980
Wisconsin	41,823	74,949	16,731	26,437	84,991	118,117	960
Wyoming	1,341	3,425			1,341	3,425	280
United States	1,027,816	2,414,804	1,114,088	231,895	2,373,799	3,760,787	54,770

Sources: For job figures, Hahn and Steger, "An Analysis of Jobs-at-Risk and Job Losses Resulting from the Proposed Clean Air Act Amendment," CONSAD Research Corporation. For costs, The Business Roundtable, Clean Air Act Cost Evaluation, Denny Technical Services.

Scenario 1 represents a bill in which all the least extreme measures now proposed are adopted: at most, 90% MACT (Maximum Achievable Control Technology) and no specific residual risk level requirement (flexible compliance approach case). Scenario 9 represents the requirements of the original Senate version of the bill. This, the most extreme case, means full compliance with 98% MACT and 1-in-1,000,000 residual risk level requirement (mandated compliance approach case).

you are living in a community and our unemployment is way down as far as checks, unemployment checks I'm talking about, as far as distribution is concerned? What happens to that worker when the family is out of a job? The greatest problem that we have in this country is job loss. You have to look—and I'm not talking in all due respect to the fast food chains. I'm talking about bona fide jobs that give you pensions, give you health and welfare protections, give you education, all the things that we associate in the United States as far as working American collective bargaining, and even without it, it's been established. So when you talk about 750,000 jobs . . . you are talking about seriously hurting people."

Brown attempted to explain to the press where real wealth comes from. He said, if "you are talking about infrastructure program in this country, where do the monies come from? If you are talking about creating the highways, where do they come from? They come from your tax base. The more you decrease working America's ability to pay taxes, the lower we get as far as the standard is concerned." Earlier, addressing the tremendous industrial growth that Germany and Japan will be fostering in Eastern Europe, Brown warned, "if we don't protect America's mining base, America's construction base, America's industrial base, then how do we survive as Americans?"

The Clean Air Working Group and American labor are not the only ones protesting. Last December, the National Association of Manufacturers gave a press conference where they warned that U.S. manufacturing industry will face severe consequences. They warned, "U.S. manufacturers could face big fines for honest, unintentional errors on federal paperwork under the new Clean Air Act." To dramatize the point, the National Association of Manufacturers representatives hauled out \$25,000 in stacks of one dollar bills. That \$25,000 is the amount manufacturers could be fined, per day, per violation, for small mistakes on federal paperwork requirements under the proposed new Clean Air Act.

NAM president Jerry Jasinowski told the press, "The proposed Clean Air Act is too inflexible and is not tailored to fit varying local air problems throughout the country. The permitting process, emissions monitoring, and record keeping are unrealistic. It adds costs manufacturers simply can't afford on top of existing clean air regulations—costs that ultimately must be passed on to consumers. . . . Excessive permitting paperwork requirements are counterproductive when they divert engineering expertise away from pollution prevention and increasing productivity."

An example of what the paperwork will look like, according to NAM, is the *Los Angeles Times*, whose application files contain more than 540 pages with the California's South Coast Air Quality Management District in Los Angeles County. "One diesel engine operating less than 16 hours a day or a maximum of 200 hours a year required 87 pages of paperwork for the *L.A. Times*," said Jasinowski. "This

demonstrates the volume of paperwork on a small business that uses a diesel engine as part of its manufacturing process."

One of the most bewildering stances the environmentalists take, is that they claim to like trees.

The staggering cost of 'clean air'

The Environmental Protection Agency was supposed to release a study over two years ago providing detailed data on the costs to the U.S. economy of environmental regulations, specially the "Clean Air" and "Clean Water" Acts. The EPA study was supposed to have been released on time to provide assistance to those drafting the Clean Air Act amendments about to be made into law in Washington. Not surprisingly, however, the publication of the report has been repeatedly delayed "because of technical problems," and is not expected to be released for at least several months, in other words, after the "Clean Air" amendments have become law. A knowledgeable EPA statistician told *EIR* the real reason the report has not been published is that the EPA under William Reilly's direction "does not wish to alarm" the legislators. The fact that senators, congressmen, and the American public are being kept in the dark about the cost of environmental regulations is a scandal of major proportions.

What are the present costs of "clean air" and "clean water"? It is not easy to say; there are several different estimates of the cost of environmental legislation. The EPA, the Department of Commerce, the General Accounting Office and the Council on Environmental Quality all have different figures and different methodology for calculating expenditures.

The Department of Commerce published one study, "Pollution Abatement and Control Expenditures, 1984-87" in the June 1989 issue of *Survey of Current Business*. The study, authored by Gary Rutledge, chief of the Environmental Economics Division, and Kit Farber, estimated a total of \$81 billion in pollution abatement during 1987 (see **Table 2**). This figure breaks down into \$32 billion for "Clean Air," \$33 billion for "Clean Water," and \$16.6 billion for solid waste. This estimate does not take into account major costs incurred by environmental legislation, including "plant closings due to Pollution Abatement and Control, delays in plant construction, or curtailment in the use of chemicals in manufacturing and agriculture." One of the most interesting figures in this study is that the American consumer paid \$16.7 billion in 1987 pollution controls on cars and trucks. New requirements under the amendments will increase those expenses astronomically.

In 1984 the EPA published its "Final Report: The Cost of Clean Air and Water. Report to the Congress" The report estimated that in 1981 the annualized cost of air and water pollution control due to federal regulations was \$42.5 billion, or about 1% of GNP. This report should have been reissued in 1988 with updated figures, but as we have mentioned, it has been delayed until passage of the Clean Air Act amendments. Using the same criteria as for the 1981 figures, EPA

TABLE 2

Expenditures for pollution abatement and control

(millions of current dollars)

	1987			
	Total	Air	Water	Solid Waste
Pollution abatement and control	81,057	32,273	32,987	16,655
Pollution abatement	76,890	30,087	32,065	16,225
Personal consumption	10,905	10,905	—	—
Durable goods	8,672	8,672	—	—
Nondurable goods	2,232	2,232	—	—
Business	49,368	18,811	20,966	11,361
On capital account	16,532	9,211	5,945	1,375
On current account	32,836	9,600	15,020	9,986
Private	26,629	9,408	7,236	9,985
Government enterprise	7,977	192	7,784	—
Costs recovered	-1,771	—	—	—
Government	16,618	372	11,099	4,865
Federal	1,237	80	707	250
State and Local	5,138	15	426	4,615
Government enterprise fixed capital	10,243	277	9,966	—
Regulation and monitoring	1,519	410	583	300
Federal	700	110	250	120
State and local	819	300	333	180
Research and development	2,648	1,776	339	129
Private	1,987	1,574	199	35
Federal	630	200	120	90
State and local	31	2	20	4

Source: Department of Commerce, Bureau of Economic Analysis. "Pollution Abatement and Control Expenditures, 1984-97," in Kit D. Farber and Gary Rutledge: *Survey of Current Business*, June 1989.

Note that under "personal consumption," \$10.9 billion, the greatest expense was for buying and operating pollution devices in automobiles. Your car's unnecessary catalytic converter costs over \$1,000 to purchase and thousands more to operate during the vehicle's lifetime. But by 1973, Detroit had already developed and tested a high compression engine that ran on leaded gasoline and achieved better emission reductions than catalytic converters!

statisticians calculate the cost was \$91 billion during 1989. Air and water pollution control account for over 80% of the EPA estimates, with solid waste, essentially garbage, accounting for most of the rest.

The 1984 EPA report states, "The federal pollution control program is projected to cost about \$526 billion in the period 1981-90 period above expenditure levels which would have resulted without new federal requirements put in place since 1970. About \$256 billion of these expenditures are for air pollution control, and \$270 billion are for water pollution control. Capital investments for federally required controls will be about \$176 billion over the same period. About \$102 billion of this total, or 58%, is related to the requirements of the Clean Air Act; the remaining \$74 billion is for water pollution control. The cost of controlling pollution from non-point sources is not included in the summary tables. . . .

Projections from the cost of controlling non-point source pollution range from \$4 billion to \$5 billion, annually." Besides "non-point source pollution," The EPA estimate does not include many other categories of costs incurred under the Clean Air Act. The categories omitted, which would add a hefty amount to the final tally, are listed in the 1984 report.

The Business Roundtable estimates that the 1990 amendments to the Clean Air Act will add an additional \$54 billion to the yearly cost of compliance under a "best estimate" scenario, and upwards of \$104 billion to the cost under the more extreme Senate version of the bill. It should be emphasized that the Business Roundtable study only takes the cost of implementing 3 out of 7 provisions in the Clean Air Amendments into account. The final bill will cost a lot more than the estimate. Nevertheless the figures are still quite staggering. It would mean compliance with the "Clean Air" and "Clean Water" Acts would cost the United States between \$145 under a "Best Estimate" scenario and \$195 billion per year.

EPA statisticians calculate that since 1970, compliance with the Clean Air and Clean Water Acts has cost the U.S. economy over \$1.2 trillion. It must be emphasized, this amount of expenses have gone towards expenditures in essentially two programs, these figures *do not* include expenditures for other major environmental programs. Major expenses not accounted for include the Superfund programs and "toxic waste," costs in cleaning "nuclear sites," asbestos removal, the non-existent threat of radon gases, wetlands, costs incurred in bans of pesticides, insecticides, and fungicides, and so on and so forth. To emphasize, EPA's \$91 billion a year does not include the costs of complying with all of those statutes—just two of them—and the cost of solid waste (which *does not* include hazardous or toxic wastes). Essentially, only two statutes are covered; a glimpse at the accompanying tables shows how many there actually are.

The bottom-line cost, gathered from conversations with EPA statisticians, is that all programs together easily exceeded \$2 trillion in the past 20 years. Since that data is not available, however, in this article we will just use the semi-official figure of \$1.2 trillion for costs incurred in fulfilling the Clean Air and Clean Water Acts.

Why the air is not 'clean'

Those individuals who believe that the air is naturally "clean air" which has become "dirty" because of the arrogance of man, should someday make a trek to the top of an erupting volcano. Nature is quite filthy, and it needs to be so. Many of the "pollutants" which environmental zealots wish to rid us of, serve critical roles in the biosphere. Some are fertilizers, such as nitrogen oxides, some are germicidal agents, such as ozone, and there are plant and soil foods—carbon monoxide and carbon dioxide. Humans need oxygen to live, yet oxygen will kill lifeforms which live in anaerobic environments. In that sense, there is no such thing as "clean

air.”

However, one travels to East German cities and is choked by thick fumes coming out of powerplants burning brown coal, just as one would be choked by fumes from a forest fire. So there are some specific locations around the world that have excess amounts of certain chemicals which are not good for human health. Those locations that have real pollution are found in areas of great poverty which rely on the most primitive technologies, be it wood burning, or fossil fuel plants burning brown coal. The solutions are installing the most advanced technologies for energy production, especially nuclear power, and bringing fusion power on line. It is useless to put scrubbers in the smokestacks of East German power plants. The East German Greens are quite correct in their acrimonious debate with the yuppified West German Greens. East German Greens are calling for nuclear energy to solve their pollution problems.

In the United States, however, almost all the advances in cleaning local air of “pollutants” had already been achieved by 1970, as documented in many scientific studies. Records show that most “pollutants” in the air had reached the lowest levels recorded in decades by the middle of the 1960s, and have not declined much since then, despite the 1970 Clean Air Act. Further “clean air” cannot be achieved because the “clean air” standards now set (which will be even more stringent once the new amendments are passed into law) are already below the natural background levels of these “pollutants.”

On the danger of acid rain: For the past decade a \$500 million study has been conducted of the causes and effects of acid rain, the National Acid Precipitation Assessment Program (NAPAP). The results, soon to be released to the public, conclude that regional concentrations of sulfur dioxide were causing *no* discernible damage to crops and forests at present levels of acid rain emissions. Also the number of acid lakes and rivers is far lower than EPA had warned, affecting less than 2% of the surface water even in the Adirondacks, the most heavily affected region. Nevertheless, the Clean Air amendments may cost \$8 billion a year, and still not solve a problem that may be completely natural. Meanwhile, all the acid lakes can be easily deacidified through liming for a mere \$400,000 a year—over \$7.9 billion less than through the Clean Air bill.

On the issue of public health affected by air pollution, many studies have shown that the hazards are wildly exaggerated. Of note is a new study that demolishes the claims of the environmental zealots, *Preliminary Comments on the Monograph ‘The Health Costs of Air Pollution’ Prepared for the American Lung Association* by Frederick Rueter, a devastating critique of the cited scare study. Rueter, whose work was published by CONSAD Research Corporation, warns that the ALA study had ignored “a wide variety of factors other than outdoor air pollution” that “directly or indirectly affect human health.” According to Rueter, “The

factors include: personal dietary, exercise and health hazards; indoor air pollution; communicable diseases episodes; air-borne pollen; and the availability, quality, and utilization of medical care.”

According to Rueter, “Many health effects studies have found that mortality or morbidity was spuriously correlated with air pollution when certain other explanatory factors unrelated to air pollution were not considered in the analysis, but that the correlations estimated for the air pollution variables became *statistically insignificant* when the other factors were entered into the estimated relationships. Indeed, such results have been derived in several of the health effects studies on which the ALA monograph is based, but have not been taken into account in the cost estimates.”

Rueter says “it can be confidently concluded” that in the health effects that underlie the American Lung Association monograph, “the health outcomes that were statistically associated with ambient air pollution levels undoubtedly were actually attributable, in whole or in large part, to omitted co-varying factors.” Furthermore, says Rueter, “The American Lung Association cost estimates grossly overstate the health consequences of people’s exposures to current concentrations of air pollutants outdoors, and clearly should be deemed unreliable as a justification for air quality legislation and public policy.”

Almost 4 million jobs at risk

The jobs of almost 4 million Americans will be at risk under the Clean Air Act amendments now being debated in Washington. These are real people, who have families to feed. What will be the ultimate effect of this legislation? How many will become homeless, how many will die from lack of nutrition and medical services they can no longer afford? These are questions that remain to be answered. What is clear is that neither the least extreme, nor the most extreme versions of the Clean Air amendments will benefit this country, and if anything, the Senate should now be debating how to rid this country of the scourge of the previous environmental acts which have caused so much harm with so little benefit.

Until Robert Hahn and Wilbur Steger released their study on jobs-at-risk as a result of environmental regulations, no other study had calculated the consequences of environmental legislation on workers.

In their conclusion, Hahn and Steger state, “We have not attempted to mesh all the job estimates across the various proposed CAA Amendment titles—III, IV, and V—under study here, since there will be a certain amount of overlap if a given plant is impacted by more than one of these proposed CAA Amendment titles. There is, however, *no doubt* that, across the CAA Amendment titles studies, there are a minimum of several hundred thousands of jobs at various levels of severity of risk—even with the more moderate administration-like CAA Amendment proposals. Furthermore, depending on the residual risk assumptions, this study leaves little

doubt that a *minimum* of 200,000-plus jobs will be quickly lost, with plants closing in dozens of states. This number could easily exceed 1 million jobs—and even 2 million jobs—at the more extreme assumption about residual risk (e.g., achieving a 1 in 1 million residual risk level). *Few* industrial sectors would be totally immune from such adversity. Large and small businesses, including new and established enterprises, will all be seriously affected in dozens of industrial sectors in locations *everywhere* in the United States.”

Hahn and Steger used several approaches, including examining the data bases for all plants in the United States that are in danger of shutting down because they simply cannot comply with the CAA requirements. In the case of just one provision in the Senate version of the Clean Air Act, over 100 plants would close, with a consequent loss of 176,050-251,400 jobs (Table 3). That one requirement, a 1 in 1 million residual risk level, essentially mandates industries to reduce emissions to a level where a “maximum exposed individual,” a fictitious character who lives next to the smokestack and breathes the emissions for a lifetime of 70 years, 24 hours a day, with no frills and vacations added, would, by the end of 70 years, experience an increased cancer risk of 1 in 1 million. One may wonder whether the senators who drafted this belong in Washington or in a mental hospital.

Hahn and Steger warn that there will also be job losses in secondary, feeder industries, and that other factors that will compound the effect of job losses in many communities. They state, “Jobs affected by the air toxics, acid rain, or permitting provisions of the proposed CAA Amendments will be *increasingly* at risk if the communities in which the affected plants are located are already in a difficult economic position. Critical economic factors include: already high levels of unemployment and underemployment; a significant underclass; troubled, perhaps fiscally failing municipalities; and other indicators of already adverse economic conditions.”

“Furthermore,” the study continues, “not only does the compounding effect work in *one* direction: It is interactive. Jobs lost due to plant closings or massive layoffs, will only add to the unemployment situation in these already distressed communities. Municipalities already burdened with extraordinary expenditures and reduced revenues will suffer from a decrease in tax collections. . . . The economic consequences of the CAA Amendments may well spell economic disaster for thousands upon thousands of already extremely troubled and hard-pressed Americans.”

In 1970, the United States had a choice, to follow the accomplishments of the space program and all the promises of technological and scientific progress it represented, or to follow the path of a “post-industrial society.” It chose the latter path, and now we are suffering the consequences, a devastated economic infrastructure.

Had the U.S. followed the path of the American System,

TABLE 3

Direct job loss estimates from plants that will be shut down by Clean Air Act amendments
(1 in 1 million residual risk requirement)

Source category	Number of plants shut down	Jobs lost
Coke ovens	—	15,000
Butadiene	9	1,200-2,100
Styrene butadiene production	22	550-1,100
Polybutadiene production	6	150-300
Neoprene production	2	50-100
Ethylene oxide production	7	1,800-3,000
Petroleum refineries	—	78,000-123,000
Pesticide production	16	400-800
Pharmaceutical production	20	500-1,000
Paper and pulp mills	—	73,000-96,000
Chlorine production	12	300-600
Chlorinated hydrocarbon production	13	350-600
Chloroform production	—	100-200
Ethylene dichloride production	6	3,900-6,600
Steel foundries	—	750-1,000
Total direct job losses	—	176,000-251,400

Source: CONSAD Research Corporation.

According to EPA data, under the Senate bill's 1 in 1 million residual risk level requirement, the entire butadiene industry, comprised of nine plants, will have to close down, and about 50% of the paper and pulp mills will not be able to meet the standards.

the \$1.2 trillion-plus that has been wasted, could instead have been applied to achieve the greatest advances ever witnessed in human history. Those funds could have paid for a colony in the Moon and a manned trip to Mars with all the stupendous technological breakthroughs that would have spun off. A tiny fraction of the funds spent on scrubbers would have gotten rid of pollution by using MHD direct conversion on coal-burning power plants; a high-speed rail corridor from Washington to Boston followed by magnetically levitated trains to replace a portion of car, rail, and air travel; high-speed rail lines for freight, rather than trucking; metro-rail systems for every major city in the country; and relatively low-temperature plasma technologies to produce steel, specialty metals, and to reclaim waste, essentially eliminating the smokestack from smokestack industries; decent housing and jobs for the millions of homeless.

The pollution which is caused by the incomplete combustion of fossil fuels would have by now been replaced by nuclear fission technologies, and the direct application of coherent energy such as plasmas and lasers to industrial production. The end cost to the consumer of energy, transportation, and consumer goods would be a fraction of what it is today, because productivity would have been on the steady increase. It is still not too late to learn from the great mistakes made in 1970.