In the old days, we thought that smoke meant jobs. That pollution was a byproduct of prosperity. And that if the air smelled funny, and the mill killed all the fish in the river, such was the price of progress. Besides, you could always get away on the weekend to a place where the air was pure, the lake was clean and the fishing was good.

Today we know better. "Smoke" has become "air pollution," with a host of noxious ingredients like sulfur dioxide, which corrodes our lungs, and benzene, which menaces our children with leukemia. Millions of tons of toxic chemicals get dumped into our water every day, from heavy metals to organic solvents. They threaten not only fish, but every person downstream.

Decades ago, nobody worried much about hazardous waste. Today we are spending billions of dollars in what can only be a partial clean-up of thousands of sites that threaten public health. Entire communities, such as Times Beach in Missouri, have been abandoned because of contamination by hazardous waste.

Pollution issues used to be local. The smoke from a factory affected the town, but not the world beyond. No longer. Acid rain, generated by pollutants from power plants, factories and automobiles, threatens forests and lakes half way across the continent and may contribute to thousands of deaths every year. Nor do the problems stop at national borders. Some are truly global. Chlorofluorocarbons like Freon are slowly destroying the protective layer of ozone in the Earth's upper atmosphere. The ozone layer shields us from harmful ultraviolet radiation; if it is lost, the result will be serious damage to human and animal life, and to crops.

The burning of fossil fuels like petroleum and coal generates billions of tons of carbon dioxide every year. This gas and others trap heat in the atmosphere. The resulting global warming could melt the ice caps, flood our coastal cities and turn huge agricultural areas into deserts. The problem is made worse by the widespread destruction of our forests, which help absorb excess carbon dioxide.

The loss of forests and other habitats threatens many species of plants and animals with extinction. Even our oceans are at risk from toxic runoff, oil spills and waste dumping at sea.

Added together, these problems may threaten the ultimate capability of our resources to sustain civilization.

Can the destruction of our environment be stopped? If so, who will pay the price? Some would have us believe that these problems are not as serious as we think, or that they can be left for the next generation to solve. Others maintain that pollution is still the price of progress, and that attempting to end it would cause massive economic dislocation, putting millions out of work.

The argument can get personal. Some companies, faced with new regulations, have threatened to shut down, pitting workers against environmentalists. Additional controls would be just too expensive, these companies say, and workers who want to save their jobs had better line up behind their employers.
Are they right? Do we really have to choose between our jobs and the environment? Is our economy threatened by efforts to stop environmental damage? Or is a damaged environment the real threat to our economic well-being? Can we afford to wait? What kind of world do we want to leave our children?
The USWA Environmental Task Force was chartered to examine these questions. We met four times. Task force members talked to union staff and local union members about environmental issues. We heard from prominent environmentalists. We examined previous USWA statements and policies. Particularly helpful was the 1989 Canadian Policy Conference Paper on the Environment.
We believe the greatest threat to our children's future may lie in the destruction of their environment. For that reason alone, environment must be an issue for our union. In addition, we cannot protect Steelworker jobs by ignoring environmental problems. This report summarizes our findings and recommendations, beginning with a basic review of the threat to our environment.

WHAT WE FACE

Over the last century, the relationship between human beings and the planet that sustains us has undergone a profound change. When the century began, our population and our technology did not have the power to alter our environment irreversibly. Now they do. Yet that power seems out of control, creating enormous conflicts between human activities and the natural world. Some of the problems are local and familiar; others are global, and seem difficult to comprehend. All of them are critical to our survival.

Air Pollution

Steelworkers know about air pollution. In October of 1948 a temperature inversion trapped the smoke and dust from zinc smelters and railroad locomotives in Donora, Pennsylvania. By the time it was over, 20 people had died from breathing polluted air. More than six thousand suffered lung problems. Shortly afterward, the Donora smelters shut down forever.

Today the air is cleaner, but is it clean enough? Union members must contend with dirty air in many of the plants where they work. And what children breathe outside the plant is similar to what their parents breathe inside the plant. A great deal of pollution is also caused by non-industrial sources, like automobiles, power plants, and waste incineration.

Some pollutants are especially common:
- **Sulfur dioxide**, emitted by power plants, nonferrous smelters and coke batteries, causes severe respiratory problems and contributes to acid rain.
- **Oxides of Nitrogen**, from auto exhaust and industrial plants, cause lung irritation, increase susceptibility to viral infections, and are a secondary cause of acid rain.
- **Particulates**, tiny particles of dust from many industrial sources, also cause lung damage.
- **Carbon monoxide**, mostly from automobiles, affects the blood's ability to carry oxygen, thereby leading to heart disease.
- **Hydrocarbons**, from automobiles, chemical plants, spray painting and many other sources, react with other chemicals and sunlight to produce urban smog and cause breathing problems.
- **Ozone** is formed in the atmosphere by reactions between hydrocarbons and oxides of nitrogen. Thirty miles above the Earth, naturally-occurring ozone helps protect us from harmful solar radiation. But at ground level, ozone formed from pollutants is a corrosive poison, irritating the respiratory system and aggravating heart and lung disease.
- **Air toxics** are thousands of especially dangerous chemicals such as benzene and lead, mostly emitted from industrial plants. They cause a variety of diseases, including cancer.

New laws in both countries have led to somewhat cleaner air. Automobiles produced in 1990, for example, emit much less pollution than their 1970 counterparts. But our air is still harmful. In 1989, for example, 119 urban areas in the United States, home to half the country's population, violated annual air pollution standards. Canada has fewer air pollution problems, due to its lower population density and cooler climate, but many Canadian cities also exceed air pollution limits.

And the improvements have slowed. With one exception, emissions of the most serious air pollutants in the United States have diminished only slightly or not at all since 1975. (The exception is lead, which dropped by 93% when it was phased out of gasoline.) Millions of North Americans are still threatened by polluted air.
Water Pollution

North America is blessed with abundant water. Canada alone has 20 percent of the world's fresh water. But there are regional shortages, especially in the American Southwest.

Today, our two countries' water quality is threatened as never before. New regulations have cut the amount of pollutants flowing directly from municipal sewage treatment and industrial plants. But it is possible to detect pesticides, toxic metals and industrial chemicals in many of the lakes and rivers we depend on for our water. The pesticides come from agricultural runoff and aerial spraying of forests and residential areas; toxic metals and chemicals come from industrial sources, and from consumer products dumped down the drain.

Lake Erie, which washes the shores of both countries, provides an example of what we can do to clean our waters, and what remains to be done. By 1960, the lake was considered "dead" because of the accumulated effects of municipal sewage, fertilizer runoff and industrial waste. Thick green mats of algae floated on its surface; beaches were littered with dead fish. But through a joint program between the U.S. and Canada, more than $9 billion was spent on new sewage treatment plants and other measures. Phosphates, which pollute the lake, were banned from laundry detergents; industrial discharges were restricted. As a result, the lake lives again. It is used for recreation; fishing is coming back. But hundreds of dangerous chemicals can still be found in its waters. Some comes from industrial discharges; some, from municipal and agricultural runoff. Some comes from overhead; much of the contamination in all the Great Lakes comes from air pollutants drifting down from the sky. It will be much harder to control these sources.

Water is growing scarcer in some areas. Intensive irrigation aids agriculture, but much of the water is lost to evaporation. Groundwater supplies are diminishing, and some have been contaminated by hazardous chemicals. Dirty water affects more than the fish. Most water treatment plants kill bacteria, but do nothing about chemicals. A hundred years ago, villages would dump their waste downstream, while taking drinking water from upstream. Today, we all live downstream.

Toxic Chemicals

More that 75,000 chemicals, metals and minerals are currently used in industry. Modern civilization depends on them. Almost everything we eat, drink, wear, walk on, use or even touch was produced using one or more of these materials.

Many are hazardous, even when the final products of the plants using them are safe. Vinyl plastic, for example, poses few risks. But the vinyl chloride gas used to make it causes liver cancer. Chromium is essential to stainless steel. But chromium compounds leaching out of hazardous waste sites are suspected carcinogens. We once saw toxic chemicals only as a threat to the workers using them. But it is essential to look at the entire life cycle of a chemical, from its manufacture, to storage, use and ultimate disposal. Every year, billions of pounds of toxic chemicals are released into U.S. and Canadian air and water. Working class communities are hit especially hard, with industrial workers exposed both inside and outside the plant.

Most of these releases take place slowly, as a normal and routine part of a company's operation. But the potential for a sudden catastrophic accident also exists. The 1984 tragedy in Bhopal, India, which took more that 2,500 lives, occurred when a single tank released 30 tons of methyl isocyanate into the air. In 1988, an explosion at the PEPCON rocket oxidizer plant in Nevada killed two, injured 350, and caused millions of dollars of damage to the surrounding community. The jobs of the 64 members of USWA Local Union 4856 working in the plant also vanished in the explosion. Even more terrible accidents occurred in 1989 and 1990, when explosions in two petrochemical plants outside Houston killed 40 workers.

Many toxic materials are dumped on land. While disposal practices are safer now than in the past, the U.S. Environmental Protection Agency estimates that 29,000 chemical waste sites in the United States alone pose a potential threat to their neighbors. As many as a million underground storage tanks in North America may be leaking gasoline and other chemicals into the soil and groundwater. And many chemicals are virtually indestructible; putting them in landfills only relocates the problem. Despite all our recent laws and regulations, toxic chemicals are increasing in our environment.

Acid Precipitation

It's called acid rain, but the problem is bigger than that. Acid can fall to earth as rain or snow, fog or mist, or on fine particles of dust.
The source of the acid is sulfur dioxide and nitrogen oxides, which react with oxygen and water in the atmosphere to form sulfuric and nitric acids. The oxides, in turn, come from industry and automobiles, especially coal-burning power plants not equipped with the proper controls.

The acid does not respect national boundaries. Copper smelters in Mexico drop acid rain on the Rockies. Power plants in Indiana and Ohio send millions of tons into Canada. Sulfur dioxide from Ontario poisons lakes in Vermont.

Acid rain kills forests and lakes. It corrodes buildings. Acid rain is damaging the tourist, hardwood forest and sugar economies of rural Quebec and the New England states. Recent evidence indicates that it may be a leading cause of lung disease, contributing to 50,000 premature deaths in the United States and Canada every year.

Acid rain has caused significant tension between our two countries. The U.S. government points to the Inco nickel smelter in Sudbury, Ontario, as the largest single source of sulfur dioxide in North America. Canadians counter that Inco's emissions are dwarfed by those from coal-fired power plants in the U.S. Midwest. In addition, Inco has made major efforts to fit pollution controls on its equipment, in part through the pressure of USWA Local Union 6500.

But many American power plants have been exempt from similar requirements, although that may change with the new Clean Air Act. Ironically, the widespread nature of acid rain results from an earlier misguided attempt at pollution control -- the smokestack. A hundred years ago, smokestacks were mostly used to create greater draft for furnaces. Air pollution made the areas around smelters and steel mills into smoky infernos, but the problem remained local. Forty years ago, however, companies began to build very tall stacks in order to inject the pollutants high in the air, so as to dilute them to "acceptable" levels. In Sudbury, Inco built the tallest smokestack in the world as its solution to an air pollution problem that had turned the surrounding area into a virtual moonscape. It worked -- locally. But it is those same pollutants that turn to acid, eventually damaging forests and lakes throughout the Northeast. Acid rain teaches an important lesson -- that the only real solution is controlling pollution at its source.

**Global Warming**

It may be the single greatest problem we face. Some have compared its possible consequences to the aftermath of nuclear war. And some form of it may be inevitable.

The problem is global warming, a gradual rise in the temperature of the Earth itself, caused by gases we are pumping into the atmosphere. A temperature rise of just 4 degrees Centigrade could melt the polar ice caps, flooding huge areas. Changing weather patterns could turn forests to grasslands, grasslands to deserts. Coastal cities would be submerged, major agricultural regions would be devastated, the weather would turn more violent.

No one can say for certain whether these changes will actually occur, or how severe they will be. Global climate is extremely difficult to predict. But the scientific theory is simple.

Our atmosphere contains a number of "trace" gases, present in very low concentrations. The most important is carbon dioxide. Carbon dioxide has a special property: it traps heat that otherwise would radiate out into space, much like the glass in a greenhouse. Hence the name "greenhouse effect." Without some carbon dioxide in our air, the Earth would cool to well below freezing.

The problem is having too much. Carbon dioxide results from the burning of fuels containing carbon, like petroleum, coal, natural gas or wood. One mile of driving a car, or one-half kilowatt-hour of coal-generated power, releases about a pound of carbon dioxide. Altogether, 18 billion tons are released every year. Most of the Earth's population contributes three tons per person to this total; North Americans contribute twenty tons each. Over the last century, the carbon dioxide concentration in the atmosphere has risen by 25%. At the present rate, it could double in the next century, triggering massive changes in the global climate.

In fact, carbon dioxide could increase even faster. This past century's rapid industrialization in the United States, Canada and Europe was fueled by the massive burning of coal and petroleum. If developing countries take the same route, huge amounts of carbon dioxide will be pumped into the atmosphere. China alone has 800 billion tons of coal reserves. But what other route to development can we offer, especially when North America continues to be the world's largest producer of carbon dioxide?

Carbon dioxide is not the only "greenhouse" gas. About 20% of the global warming problem comes from methane, released by decaying organic matter and leaky natural gas systems. Other industrial chemicals or pollutants are responsible for 25% of the problem. The levels of all these gases are increasing in the atmosphere, mostly as a result of human activities.

**Deforestation**

Green plants remove carbon dioxide from the air and put oxygen back in. It was plant life that kept carbon dioxide levels balanced before humans began burning huge amounts of fossil fuels and wood.
Forests are, therefore, the lungs of the Earth. But our forests are being destroyed at an unprecedented rate. More than 27 million acres of tropical rain forests -- an area the size of Pennsylvania -- disappear every year. For the most part, they are burned, adding still more carbon dioxide to the air.

Deforestation has another consequence. The rain forest is home to millions of species of plants and animals, many as yet undiscovered. Many of these species may be extremely valuable to human welfare. Important new medicines have been derived from rain forest plants, including the most effective treatment for childhood leukemia. But these species are disappearing with their rain forest habitat.

Much of the cleared land is used for agriculture, in some cases for huge ranches exporting beef to richer countries, in other cases for subsistence farming by those driven to the countryside by urban poverty. But rain forest soil is low in nutrients, so the farmers and ranchers usually have to clear another stretch in a few years. Sometimes the land is logged, often to gain foreign exchange to repay the enormous foreign debts owed by many developing countries.

Saving the rain forests of the Amazon basin has become a major issue for the people of that region, often at great cost to their own safety. One example was Chico Mendes, the leader of a union of Brazilian rubber tappers who depend on the forest for their livelihoods. Mendes gained worldwide attention through his fight to stop the unrestricted clearing of rain forest land by wealthy ranchers. But in 1988 he was gunned down, joining thousands of workers, peasants and Indians who were murdered when they got in the way of the developers.

The problem of deforestation is not confined to the tropics. The old growth forests of North America are even more efficient recyclers of carbon dioxide. They too are being destroyed by massive logging.

The logging has become a difficult issue in the Pacific Northwest, British Columbia, Northern Ontario and Alaska. Lumber companies and their workers understandably want the right to continue to log. Environmentalists point out that, at current rates, the old-growth forests will only last another decade or so, and that the industry has lost far more jobs through productivity improvements than it will by restricting logging to younger trees, at a rate no faster than they can be replaced by new growth. In addition, environmentalists ask how we can expect developing countries to protect their ancient forests, when we will not protect our own.

**Ozone Depletion**

Carbon dioxide is not the only trace gas threatening the planet. Chlorofluorocarbons (CFCs) are a group of chemicals including Freon and Halon. They are widely used as refrigerants, solvents, fire suppression agents, aerosol propellants, and in the manufacture of plastic foams.

CFCs, and certain chlorinated solvents, can float to the upper levels of the atmosphere, where they react with naturally occurring ozone gas. Ozone is a poison at ground level, but 30 miles up it shields the Earth from damaging ultraviolet radiation. If we lose the ozone layer, the result will be widespread skin cancer, crop failure and the extinction of many species of animals and plants.

CFCs are extremely stable. They can last for 75 years or more in the upper atmosphere. One molecule of Freon can destroy a hundred thousand molecules of ozone. Holes in the ozone layer have already begun to appear around the north and south poles, where frigid temperatures accelerate the process. CFCs also contribute to the greenhouse effect and global warming, through an entirely different mechanism.

Fortunately, we have begun to control this problem. New international treaties will lead to the eventual phase-out of CFCs and other ozone-damaging chemicals. Many companies are working on substitutes. Allied Signal, for example, was once a major producer of CFCs. At its Buffalo Research Lab, whose 70 workers are represented by USWA Local Union 8823, the company is researching HCFCs (hydrochlorofluorocarbons), compounds similar to CFCs, but far less destructive to the ozone layer. HCFCs may provide a transition to substitutes that will not damage the atmosphere at all; Allied Signal is working to develop those substitutes as well.

**The Oceans**

On March 24, 1989, the oil tanker Exxon Valdez spilled 11 million gallons of oil into Alaskan waters. The accident could have been much worse; the spilled oil represented only 6% of the ship's cargo. Even so, the shoreline more than 100 miles away remains polluted with oil, despite billions of dollars of "clean-up." The ultimate damage to the environment will not be known for years.

Oil spills are not the only threat to the oceans. About one quarter of North American waste water is dumped directly into the sea, including millions of pounds of toxic chemicals. Some solid waste also is dumped at sea, out of sight of the shore. The hypodermic needles and other medical waste washing up on our beaches are only the most visible signs.

Much of the life of the sea is nurtured by natural bays and marshes along the coastline. But many of these natural areas have been destroyed by unrestrained development.
The pollution of the seas already threatens shellfish in many areas. In the future, it could seriously diminish the supply of fish needed to feed the world's population. Plankton -- microscopic marine plants -- help remove carbon dioxide from the air, and provide the ultimate food source for most creatures in the ocean's food chain. If they are lost by oceanic pollution, the result will be global catastrophe.

**Population**

In 1800, at the start of the industrial revolution, the Earth's population stood at about 500 million. Today, it is a ten times greater -- 5.2 billion. At current rates it will double in less than 40 years. Most of this growth will take place in developing countries.

Some environmentalists believe that overpopulation is a fundamental cause of environmental degradation, and that famine in Ethiopia and other countries is a natural result. Some have even suggested that such famines are a regrettable, but natural, means of bringing population into "balance." However, the world produces more than enough food to feed its current population. For example, enough grain is produced to give everyone on Earth two loaves of bread a day. Even more could be produced through more efficient use of our agricultural resources. The real problem is one of distribution -- of poverty and wealth. Most poor countries, Ethiopia included, could feed their own populations through agricultural and economic development. Done right, that development could occur in ways that do not cause environmental damage.

In fact, development also is linked to population. It is no accident that rich countries are approaching stable populations, while poor countries must deal with rapidly increasing numbers. Persons in impoverished societies tend to have more children, because children, and what they can earn, are essential to survival. Population growth cannot be limited without a worldwide attack on poverty.

**A UNION ISSUE?**

The problems of acid rain, global warming, ozone depletion, oceanic pollution and world poverty remind us that we can no longer think of ourselves solely as citizens of the U.S or Canada, or even as North Americans. The potential catastrophe is global. Environment must be a global issue.

But is it a union issue? Should we work to protect the environment merely as good citizens, or is there a special role for our union to play?

We believe the answers are clear. Environment is an essential union issue. Environmental work must be part of our mission at every level of the union. The reasons are several.

* First, we must protect our children's world.*

Steelworkers have always fought for a better life for their children. Most of us are the descendants of immigrants who came to the United States or Canada seeking a better future, not just for themselves, but for later generations as well. They sacrificed enormously to build a finer tomorrow for their offspring. They created this union as a force to ensure that their sons and daughters would have a better life.

Today, the greatest threat to our children's future may be the destruction of their environment. Some of the worst consequences of environmental damage, such as global warming and the death of the oceans, will not occur in our lifetime. But they could devastate the world of our children.

Some people believe that we can leave the problem to future generations. That is a delusion. Like a bad debt, the cost increases every day. CFCs were first developed in the 1930s. By the early 1970s several scientists warned about their capacity for damaging the ozone. However CFC manufacturers, led by DuPont, argued for delay. CFCs were banned from aerosol sprays in the U.S. and Canada in 1978, but other uses quickly filled the gap. It took almost ten more years to achieve an agreement cutting the use of CFCs, during which time 15 billion pounds were produced. The ultimate damage will be much greater as a result.

The longer we wait, the worse it will get. It will cost billions to clean up toxic waste problems that could have been avoided for far less money, and with far fewer cases of death and disease. It will cost our children much more to tackle these problems than it will cost us. Leaving it all to them is the worst sort of irresponsibility.

* Second, protecting the environment ultimately protects our jobs.*

At first glance, this seems to run counter to everything we have heard about environmental issues. The common assumption seems to be that protecting the environment will destroy the jobs of thousands -- maybe millions -- of workers in our basic, smokestack industries. Which view is correct?

In a technological sense, the solutions to environmental problems are within our grasp. Some may require continued research while we take the first steps, but none are beyond our technical capacity.

Air and water pollution can be virtually eliminated by redesigning manufacturing processes, switching to cleaner products, installing good control technology, and recycling more of what we currently throw away.
Many toxic chemicals can be replaced by safer ones. Those that cannot, can be confined to closed manufacturing systems and recycled after use. Abandoned waste dumps will be with us for a long time, but they too can be cleaned up through a concerted program. Acid rain is caused by a particular form of air pollution -- oxides of sulfur and nitrogen. Acid rain can be controlled by capturing those pollutants through the use of scrubbers and other devices installed on power plants, certain industrial sources, and automobiles. The ozone layer can be preserved by phasing out the chlorofluorocarbons and other chemicals that destroy it. The new international agreements on ozone depletion, and the current research on substitutes, show that even worldwide problems can be solved.

Solutions to global warming will be more difficult. Cutting carbon dioxide emissions will take a massive worldwide effort. But it can be done. Immediate gains can be made by more efficient use of energy, such as better building insulation, greater automotive fuel efficiency, new mass transit systems and improved energy recovery in industrial plants. West Germany and Japan, for example, are almost twice as energy efficient as North America, as measured by the amount of energy it takes to produce an equivalent amount of gross national product. In the long run, alternate non-polluting sources of energy like solar power can largely replace fossil fuels. Coal and petroleum could then be used as feedstocks for the chemical industry, creating new products instead of being wastefully burned. None of this, however, will be easy or cheap. The real problems are not technical -- they are economic and political. Our society will change enormously, either through our efforts to save our environment, or because environmental destruction finally overwhelms us. As a union, we cannot stand aside from these issues. Difficult choices will have to be made. The only question is who will make those choices, and how? Will working people be the victims of change, or will we help control that change to the benefit of ourselves and our children?

Steelworkers have heard the jobs argument before. For many years companies have tried to use economic and environmental blackmail on the union and its members. In every fight for a new health and safety regulation, or better wages, or improved pensions, there is a corporate economist to tell us that if we persist, the company or the industry will fold, with hundreds or thousands of lost jobs. It rarely turns out to be true, and for good reason. Someone has to design the cleaner process or equipment. Someone has to build it. Someone has to install it. Someone has to operate it. Someone has to maintain it.

In the long run, the real choice is not jobs or environment. It's both or neither. What kind of jobs will be possible in a world of depleted resources, poisoned water and foul air, a world where ozone depletion and greenhouse warming make it difficult even to survive?

Even in the short run, companies that exist only by destroying their resource base, or pushing their environmental costs off onto others, will not be in business very long. Some plants have shut down, not because they acted responsibly toward their neighbors, but because they did not. For example, the Johns Manville Corporation declared bankruptcy in 1982 after projecting billions of dollars of potential liability for diseases caused by the company's failure to warn users about the risks of asbestos. Thousands of workers lost their jobs in the resulting shakeup. Jobs can be lost in any time of change -- and the changes ahead are enormous. Sometimes the cause is short-term greed, the desire to make a fast buck and get out, abandoning workers and the community. Sometimes the cause is management's unwillingness or inability to adapt to changing conditions. The Ethyl plant in Baton Rouge, Louisiana, was a major producer of lead additives for gasoline. When the government banned leaded gas in 1985, management shut the plant down, putting more than a thousand members of USWA Local Union 12900 out of work. Yet the plant could have adapted to the manufacture of other products, as Allied Signal is doing in the example cited earlier.

Some corporate managers try to pass the cost of their own misdeeds off onto their workers. For example, at Uniroyal Chemical, near Guelph, Ontario, 230 members of USWA Local Union 13691 went on strike in May 1990, when the company demanded concessions in order to pay the cost of cleaning up a leaky, poorly designed waste site. Some companies understand that their own survival depends on their environmental record. But many do not. We cannot expect the company or the government, or for that matter the environmental community, to defend our interests for us. Protecting our children's future and our own jobs requires collective bargaining and political action. We must push our own companies to improve, not only as a way of protecting the environment, but as a way of preserving jobs as well.

At the same time, we must recognize that some plants will close no matter what we do. It does not help these workers to argue that other jobs will be created somewhere else, in some other industry. Protecting the environment may create jobs on the average, but displaced workers need jobs themselves, not the knowledge that some other worker is benefiting from their sacrifice. It is, after all, the worker, not the government or corporate stockholder, who has the most to lose when a plant closes.
It is fundamentally unfair to require working people to absorb the cost of environmental controls that benefit society as a whole. Nor is it politically workable, since it inevitably creates opposition to environmental reform, and pits workers against environmentalists.

The only answer is to link environmental issues with economic justice. In particular, income protection and job retraining should be automatic for workers who are displaced because of new environmental regulations, or the failure of their employers to adapt. For example, the USWA and other unions are lobbying intensively to add an Environmental Adjustment Assistance provision to the Clean Air Act currently in the U.S. Congress, and to make similar improvements to the unemployment compensation systems in Canada.

In addition, companies that curtail operations temporarily in order to install new equipment, or to comply with pollution regulations, should be required to continue the earnings of affected workers. In fact, such a provision was written into the 1977 Clean Air Act Amendments in the United States, for workers in copper smelters that shut down temporarily in order to reduce their average emissions to allowable levels. At the Rocky Flats nuclear plant in Golden, Colorado, USWA Local Union 8031 has won an order from the U.S. Department of Energy requiring full earnings protection while production is suspended for a thorough cleanup.

Ultimately, protecting the environment will require cleaner products, methods of production and sources of energy. That, in turn, will take research. For example, the U.S. Department of Energy has joined with several major steel companies to develop a direct steelmaking system that bypasses coke ovens and blast furnaces. The new method could greatly cut steel plant pollution, and increase the competitiveness of North American companies. But without proper planning, it could affect thousands of jobs and further impoverish steel communities. Technological improvements are essential to a cleaner environment. However, new technology -- especially that funded by the government -- must be subject to democratic planning, and introduced in a way that protects the economic interests of workers and communities, as well as companies.

We cannot serve our members by ignoring environmental issues. We cannot protect them by pretending to resist change. Our mission is to adapt to change and to channel it for the long-term benefit of our members and all working people.

* Third, environmental issues are linked to all the other issues confronting us.

Economic forces are the key to almost every union issue. Environmental issues are no different. Companies usually try to "externalize" their costs -- to make someone else pay part of the real cost of production, for example when workers are asked to pick up part of the cost of their health insurance.

Sometimes those costs are hidden. Bad working conditions lead to an increase in occupational accidents and illness. Some of that cost is paid by the workers' compensation system; most of it, however, is absorbed by the victims themselves in disability and lost income, and by all the rest of us, in higher overall medical and insurance bills. Often these externalized costs are much larger than the costs the company avoided by refusing to improve conditions in the first place. But the company's concern is its own bottom line, not the overall cost to society.

As Steelworkers, we understand this process well. Our efforts to win higher wages, improved pensions, adequate insurance and safe working conditions are efforts to stop the company from dumping its costs onto us. Environmental economics work the same. Some companies try to maximize their profits by ignoring the cost to the environment. Pollution is pumped into the air and water, toxic chemicals are allowed to escape, greenhouse and ozone-depleting gases are generated because the cost to the environment never appears in the company's balance sheet.

But the cost is real. And while the cost of environmental damage may be external to the company, the Earth itself is a closed system. Considering the Earth as a whole, there is no such thing as an external cost. A healthy economy is essential to a healthy environment. Protecting the environment ultimately means more efficient production, with less drain on the Earth's resources, and less waste. But it will cost money to research, design and implement new controls; it will cost money to substitute new products for old.

Economic justice is critical. In a full-employment economy, workers displaced because their companies failed to adapt will find new jobs. Union rights are important also, to ensure that the jobs provide decent wages and benefits. In fact, the environment impacts almost every union issue. Our health care system, for example, is stressed by the burden of environmental disease. The problems of poor people and minorities are made worse by the fact that they are often forced to live in the most polluted areas.

On a global scale, it is useless to work for a clean environment without also working for economic justice and human rights. It is no accident that the countries of Eastern Europe, where free speech was suppressed for so long, where free trade unions were outlawed, where all the decisions were made by a small and privileged elite, are among the most polluted on Earth. It is no accident that the residents of the Black townships of South Africa suffer high rates of respiratory disease brought on by ferocious levels of air pollution.
Some companies may try to avoid strong environmental regulations by moving overseas. But the answer is not to repeal our own laws, any more than the answer to global competition is to cut our own wages to poverty levels. Instead, we should work with unions and governments in developing countries to improve conditions there. A good first step would be to stop making the problems of developing countries worse than they already are. Some industrialized countries have tried to use poorer nations as a dumping ground for toxic waste. That practice should be prohibited by international law. In addition, we should forbid the export of products and processes prohibited in the exporting country because they damage health or the environment, and work to ensure that all other exports can be used safely. Correspondingly, we should restrict the import of products made in ways that damage the environment. It does not help the world environment to export pollution -- and jobs -- to countries unwilling to meet fair standards. Near Sao Paolo in Brazil is a 1.6 million ton steel plant owned by the Brazilian steel company COPISA. The smoke and dust from that plant help give the Cubatao area the nickname "Death Valley." There are reports that hundreds of workers and nearby residents suffer blood diseases due to uncontrolled benzene emissions. Thousands are afflicted by respiratory diseases. Brazil needs steel for trucks, bridges, housing and consumer goods. But the production of the COPISA plant is exported to North America to earn hard currency to pay off Brazil's enormous debt. We need to deal with the problem of Third World debt if we are to control pollution from that plant, or stop the destruction of the rain forests, or solve the other problems of our common global environment. The World Commission on Environment and Development, set up in 1983 by the United Nations, has defined the goal as "sustainable development," finding a way to meet our present needs without destroying the ability of future generations to meet their own needs. In the words of the commission: "Sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfill their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes."

TAKING ACTION
"Your role as a consumer of air can be crucial for the community because you may well be the bridge between the community and the plant, in the sense that you actually work in the plant. The community may well be influenced in the type of standards it recommends by your attitude about and desire for safe air. We refuse to be the buffer between positive pollution control activity by the community and resistance by the industry. While the security of our jobs is not the price which will be paid for aggressive abatement activity, the ruination of our health may well be the risk which will be taken for the lack of action."

-- I.W. Abel
USWA Air Pollution Conference
1969

Unions have always led the fight for economic justice and human rights. We have sought to increase the income of all workers, organized and unorganized. We have struggled for better working conditions and fair treatment on the job. We have worked to ensure better pensions for our parents, and a better education for our children. Frequently, we have fought for safer working conditions -- in other words, for a cleaner environment inside our plants. Workers have a gut understanding of environmental issues -- 100,000 North Americans die each year from workplace diseases caused by the same chemicals that later find their way into our air and water. The environment outside the workplace is only an extension of the environment inside. Today, the greatest threat to our children's world may be the destruction of their environment. Our own jobs are also threatened by corporations that pollute their neighborhoods and walk away. Protecting the environment is more than good citizenship, it is an essential program for unions and their members. In some ways, the USWA has had an environmental program for more than 20 years. We held our first conference on air pollution in 1969, more than a year before the first "Earth Day." A conference in Denver examined pollution from smelters in the western United States in 1973. District 6 held air pollution conferences as early as 1966. A 1980 USWA Convention resolution warned of the dangers of global warming, years before it became a matter of widespread public concern. And in 1989, the Canadian Policy Conference adopted a strong policy paper on the environment. But for the most part, the USWA has seen environmental protection as a legislative issue. We provided strong lobbying support for nearly every major environmental bill in the U.S. Congress, the Canadian Parliament, state legislatures, and provincial assemblies. In the United States, the USWA is an active member of the National Clean Air Coalition, and was instrumental in the passage of the 1990 Clean Air Act and earlier legislation. In Canada, the USWA participates in the Canadian Coalition on Acid Rain. In turn, environmental groups helped us achieve many of the right-to-know laws in the United States, and effective chemical testing regulations in Canada.
Some USWA locals are working hard on environmental issues. Local Union 6500, at the Inco nickel smelter in Sudbury, Ontario, has been fighting sulfur dioxide pollution since the local was chartered in 1961. The local helped force the Ontario government to begin measuring pollution levels in the town. In coalition with neighboring environmental and community groups, Inco steelworkers have won dramatic improvements in pollution control. Environmental committees have been established by Local Union 1010, District 31, at Inland Steel in Indiana, and Local Union 480, District 3, at the Cominco Lead/Zinc smelter in Trail, British Columbia. The committees work with environmentalists from the community to protect both jobs and the environment. Other local unions have added environmental issues to the regular duties of their safety and health committees.

These locals point the way. The environment is not just a legislative issue. Protecting our children's future and our own jobs from the threat of environmental destruction is a job for all levels of the union.

Some say the task is too big for any one local, or union, or country. Certainly it is. But that has never stopped us from fighting for economic justice or human rights in the past. The biologist Rene Dubos coined a phrase that sums it up: "Think globally; act locally." We should not forget the global nature of the problem, but we must not be paralyzed. In this issue, as in any other, an active union can have an impact.

In fact, workers are in a key position in the fight for environmental quality. Violations of pollution regulations can be difficult for the public to spot. Nor is it possible for the government to monitor continuously every potential polluter. It is much harder to hide illegal behavior from plant workers. And through collective bargaining and the power of the union, organized workers have an especially effective tool for forcing a cleanup.

Some maintain that environmental problems can be solved through individual actions, like turning off lights, reusing plastic bags and car pooling to work. Individual efforts are valuable and they should be promoted. They can help cut pollution and decrease the waste of our resources. More important, they can help establish a personal commitment to protecting the environment.

But individual efforts are not enough. Car pooling will not force Detroit to build vehicles that do not pump carbon dioxide into the air; cutting our use of plastic bags will not lead to the development of safer manufacturing processes for plastics; turning off the lights will not get scrubbers built on coal-fired utility plants. In fact, individual energy use accounts for only about 30% of total consumption.

As union members, we have learned the value of collective action. We do not tell oppressed workers to handle it themselves, individually. We attack the problem with the strength that comes from organization. We do promote individual efforts -- consumer boycotts are a good example. But we focus our efforts on organizing, collective bargaining and political action. Protecting our children's world and our own jobs will require a coordinated program, involving all levels of the union.

At the level of the International Union, we must continue to work for progressive legislation. This includes laws --
* Improving air and water quality.
* Requiring reductions in toxic waste, and restricting the use of toxic chemicals.
* Promoting recycling, in ways that protect union jobs.
* Protecting "whistleblowers" who report suspected environmental violations, and workers who refuse to carry out an order that violates environmental laws or endangers the public.
* Guaranteeing income protection and job retraining for workers displaced because of environmental problems.
* Ensuring that new technology is introduced in a way that is subject to democratic planning, and protects the interests of working people and their communities.
* Banning, or defining as an unfair trade practice, the import of products made abroad under conditions that do not meet environmental standards.
* Prohibiting the dumping of toxic waste from North America in developing countries, and the export of products or processes that are banned in the exporting country for environmental reasons. Working to ensure the safe use of all other exports.
* Supporting strong international agreements on greenhouse warming, ozone depletion, and other global issues.
* Giving financial aid and debt relief to developing countries, in order to help them achieve sustainable development.

As always, the most important actions must take place at the local union level. First, local unions should establish a structure for dealing with environmental issues. In a large industrial local, an environmental committee could be formed. In a smaller local, the issue could be handled by the safety and health committee. Whatever the structure, the committee should have the support and interest of the local union officers and the staff representative. The environment or safety and health committee should undertake the task of researching the company's environmental record. Are their sources of raw materials threatened? Where does their waste go? What are they dumping into the air and water? Are their products harmful? Are they in violation of any environmental laws or regulations? Much of this information is a matter of public record. All of it should be legally disclosable to the union.
as information needed for collective bargaining. Any of it could be critical to devising a long-term program for protecting jobs.

Armed with information, the local union could, where necessary, work to negotiate a clean-up, or a switch to safer products, before the company is forced out of business. In 1982, for example, Local Union 6887, at the Noranda copper refinery in Montreal, helped the company negotiate a temporary variance from new water pollution regulations, in return for a commitment to install state-of-the-art controls assuring the plant's long-term compliance. In 1989 Local Union 1066, at the USX Gary Works, used its political power to force a waste handling company on the plant site to reduce its inventory of dangerous chlorine gas, and to begin working with USX on an emergency response plan.

Most USWA contracts give workers the right to refuse abnormally hazardous work. This provision should be extended to orders that threaten public health, or violate environmental regulations. "Whistleblower" language should be negotiated, protecting workers who report suspected environmental problems to the union or outside authorities.

Local unions can also join with environmental groups on common issues. We need them to support and understand the concerns of working people. They, in turn, can benefit from our organizational strength and knowledge of the workplace.

One such coalition was built in 1983 by the members of USWA Local Union 25 and environmentalists in Tacoma, Washington. Earlier that year, the Reagan-appointed officials of the U.S. Environmental Protection Agency had proposed a new regulation for arsenic that would apply only to the Asarco Tacoma copper smelter. The regulation was designed to close the plant; it had the potential for driving a wedge between unions and environmental groups. But that never occurred. Environmentalists opposed closing the plant; the union listed ways arsenic could be reduced using engineering controls. Together, they distributed thousands of buttons with the single word "Both," in answer to the Reagan Administration's jobs vs. environment blackmail. The coalition was successful; EPA began work on a revised regulation specifying additional controls rather than a plant shutdown. However, the story has a sad ending. Two years later, Asarco itself closed the plant in the wake of declining copper prices. Asarco is now spending millions to clean up the site.

In Canada, the USWA also is working with environmentalists to preserve both jobs and the environment. For example, USWA Districts 3 and 6, along with a number of environmental groups, have opposed the development of new surface mines for high-grade uranium ore in northern Saskatchewan. The mines would seriously damage the fragile environment of that region, create severe radiation risks to miners, and throw thousands of workers in existing operations out of work.

Finally, local unions can educate their members and their families on local, national and global environmental problems. In addition, locals can help educate our environmental allies on the needs of working people for decent, continued employment.

In these efforts, local unions will have the support of the International Safety and Health Department, which will be renamed the "Health, Safety and Environment Department" in recognition of the importance of environmental issues. Support will also be available from the Canadian National Office. The union is producing educational materials on the environment, available for local union use. The department and the National Office will be available to work with local unions on environmental issues.

**CONCLUSION**

None of this will be easy. Environmental issues involve difficult technical and economic questions. They are politically contentious, with workers often caught between their employers and environmentalists. We do not claim that it will be a simple matter to add the environment to the long list of issues with which the USWA must contend. We do, however, believe it is essential to our survival as a union.

More important, it is an essential part of our moral responsibility as union leaders, charged with defending the interests of working people. It has been said that we inherit the Earth from our parents. But in reality, we borrow it from our children. It is our children's world. We must not fail to protect it.