num, copper, and titanium. Already, aluminum mills in the Northwest have been asked to cut back on production during winter months by the Bonneville Power Authority to "conserve electricity."

- The use of nitrogen, the basis for most agricultural fertilizers, will be severely limited, if not banned. Crop yields will fall by half. Pesticides and fungicides will also be severely curtailed. The National Agricultural Chemicals Association has estimated that consumer food prices will rise 13%, and U.S. supplies of fruits and vegetables will collapse by 24%, if the use of crop-protective fungicides is prohibited.
- Virtually every oil refinery in the United States will be shut down. Already, oil industry executives have begun shifting refining operations to overseas facilities. The steel industry will have to shut down between 36 and 39, and perhaps all, of its 40 coke oven plants. According to EPA studies, about 50% of U.S. pulp and paper mills will not be able to meet the new standards, and will be shut down.
- Under existing law, only eight "air pollutants" are regulated—mercury, asbestos, beryllium, vinyl chloride, benzene, radionucleides, inorganic arsenic, and coke oven emissions. The new amendments name 191 substances to be identified as "hazardous air pollutants," and specify that "major sources" of these substances will be strictly regulated.
- A "major source" of pollution can be quite minor and may emit only 10 tons per year (TPY) of any listed substance, or 25 TPY of any combination of listed substances. Some of these so-called pollutants are critical elements in industrial production, such as butadene, which is used to make synthetic rubber.

## An environmental police state

- Basic constitutional rights, such as a trial by jury, are eliminated by this monstrous legislation. The EPA is empowered to impose severe civil and criminal penalties for the tiniest infractions, by administrative fiat—and is given powers far greater than the Internal Revenue Service. Citizens may have a court trial only if they appeal after being convicted by the EPA. The amendment has ample provisions for environmental bounty hunters to bring "civil" suits and actions, and take a share of whatever fine is imposed by the EPA!
- A person can be jailed for up to two years for each violation. Each day, for example, of operating a plant with too great an emissions level, or failing to file proper forms, can be considered a distinct violation.
- The amendments establish a total ban on chlorofluorocarbons (CFCs,) and impose mandatory jail sentences for individuals and companies that provide Third World countries with the technology to manufacture CFCs. Third World countries that desperately need refrigeration equipment to prevent food spoilage, will not get it, because the technology depends on CFCs. This, despite the fact that there is no conclusive evidence supporting the contention that the ozone layer is being depleted by CFCs.

## High technology can clean up the environment

Pollution is a result of the incomplete combustion of fossil fuels or other inefficient industrial processes. Therefore, the way to clean up the environment, and advance the economy a the same time, is to progress to more efficient, productive technologies.

Here are a few of the technologies that would reduce pollution, increase productivity, and lower costs to industry and consumers.

Standardized nuclear power plants—modular light-water reactors could be mass produced and put into operation within six years.

Modular high-temperature gas-cooled reactors—should be commercially developed and mass produced, providing higher temperatures for industrial processing.

MHD—coal can be burned more efficiently and without pollution, by using magnetohydrodynamics.

**Fusion**—an accelerated research and development effort could make fusion available soon after the year 2000.

High-speed rail—the irrational growth in longhaul commercial trucking has been fed by the collapse of the nation's railroads. Modern rail systems would return energy-wasteful trucking to short-haul, intracity transport. Faster, high-speed rail should be built for intercity passenger and freight transport.

Maglev—magnetically levitated vehicles, which do not have any contact with their metal guideway, achieve speeds up to 300 miles per hour for passengers and light freight. This system would provide clean, fast, safe transport for distances of 100-600 miles.

Plasma processes—an array of low-temperature plasma processes (a few thousand degrees) could revolutionize metals processing. Rather than chemically reducing ores or recycled materials, they can be directly separated into their constituent elements. No pollution is produced.

**Directed energy**—lasers, electron beams, and other forms of coherent energy can be directly applied to materials for cutting, drilling, and other operations, to replace metal-on-metal machine tool-making and finishing techniques. This would result in orders of magnitude increases in productivity, and improved energy efficiency.