

Lakeville  
Dr. Sr  
Hi

Supt. Mc. Heine  
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Don Mc Carter

Lakeville Junior High  
Symposium (Minn.)  
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1970

As a man who has had the privilege of serving the people of this country in public service for many, many years, first as Mayor of a great metropolis, second as Senator from a very progressive state and one which I might add is in the forefront of the fight to combat pollution, and third as Vice President, I have observed the difficulties inherent in achieving solutions to some of the most serious problems that have confronted us as a nation. Some of these issues have never been fully resolved.

--Our Ghettos still tarnish the bright image of a strong, prosperous nation.

--Poverty still casts its ugly shadow throughout the land and condemns many of our citizens to an existence without hope beyond the most minimal subsistence level.

Hunger -

Population

That is why I am pleased at the growing national awareness of the importance of preserving our environment. And I hope that this movement will extend itself in seeking cures for some of our social ills, because these too are a part of man's environment.

Once we were a nation blessed with abundant resources

--tall, magnificent forests graced our landscape

--our great lakes, bays, rivers, and streams were filled with clean water

--a variety of wildlife species thrived, unthreatened by the chemicals

invented by man.

But the development of this nation industrially and by expansion eroded these resources, until now the very existence of man is threatened as a result of this development.

our  
environment

Clean Air Act of 1963

Clean Air + Solid Waste Disposal Act, 1965

Clean Rivers Act of 1966

Water Resources Planning Act of 1966

Air Quality Act of 1967

National Environmental Policy  
Act of 1969

From the national standpoint, pollution is a lot like the weather -- everyone is talking about it, but no one is doing much about it.

When you put aside the rhetoric and examine the figures you find that the federal government will spend less -- and do less -- this coming year than in any year since it entered the pollution battle.

~~(Some background for potential legislation -- argument for the need for additional legislation.)~~

And --  
All existing pollution legislation stops at our feet -- the Water Quality Act and the Water Pollution Control Act are both designed to protect our surface water -- our lakes, rivers, and streams.

Other acts are directed at air pollution and conservation of wilderness areas. There is still no legislation to protect our vast bodies of sub-surface water -- the underground reservoirs that are the water supply of the future.

Industry is already taking advantage of this gap in the control laws and dumping toxic wastes down deep -- injection wells -- wastes that in a few years, or sooner, will migrate underground and poison these valuable reservoirs.

Much of this waste -- injected under pressure into geological formations, once considered stable -- eventually finds its way to the surface and re-pollutes the surface waters and the atmosphere.

Brine wastes injected deep in the earth in Canada have already erupted in Michigan. In Texas, sweet wells have been poisoned and sewer lines have broken as high pressure waste injection found new underground channels.

20,000 die from Pollution

It is shocking to realize today that an estimated 20,000 people die annually as a result of air pollution. The internal combustion engine alone used in the automobile accounts for 60% of our air pollution problems. There are seven major types of air pollutants -- lead, organic compounds, carbon monoxide, nitrogen oxides, particulates, sulfur oxides, which combine with the water vapor in the atmosphere to form sulphuric and other acids and carbon dioxide. Recent studies have shown that smog is killing 100,000 acres of ponderosa and jeffrey pine trees in the San Bernadino National Forest near Los Angeles. The estimated loss in California in crops due to smog was \$8 million dollars in 1961. Smog oxidents destroy the leaf tissues which carry on the vital plant life processes of photosynthesis. Air pollution is a threat to man's health. The rate of lung cancer and emphysema among non smokers in urban areas is several times that of their rural counterparts who breathe cleaner air.

The pesticides are another hazard. The ban on DDT is not sufficient because of the damage already done in the buildup of the chemical in the cells of our wildlife and this damage may be irreparable.

The herbicides are another matter. A ban has been instituted on 2,4,5T, effective January 1, 1970 by the Department of Agriculture. 2,4,5T has been used in Vietnam since 1962 to defoliate the combat areas and is still used against "enemy training and regroupment centers and in areas where the population is not loyal to the Saigon government". It has been found to cause birth malformations in rats and mice and in the study by the National Cancer Institute in October of 1969 it was concluded that 2,4,5T was probably dangerous to man.

2,4D is another. ~~hexachlor~~ It is one of the six best selling pesticides in this country and grosses \$25 million annually and even though it has been labeled potentially dangerous, ~~no~~ action on banning this substance has been announced.

85  
million  
cars

60%

DDT

According to the Food and Drug Administration 800 to 1,000 people die from pesticide poisoning each year and an additional 80,000 to 90,000 people are injured from these pesticides. The farm worker has been one of the chief victims of pesticides in the past. The chemicals are extremely dangerous to work with and in some cases a few drops which penetrate the clothing of the workers have resulted in death. But far worse will be the number of human deaths caused by these chemicals, such as DDT or 2,4,5T after a lifetime of exposure,

Each year 200 million tons of smoke and fumes are spewed into the atmosphere.

*195 million tons of Solid Waste*

Each year Americans junk 7 million cars, throw away 20 million tons of paper, 48 billion cans and 28 billion bottles.

The estimated cost to bring pollution under control is \$275 billion dollars over a thirty year period. This is the equivalent of the anticipated Department of Defense expenditure over the next four years and I think it must be one of our chief priorities. Congress last year appropriated \$800 million for water pollution. This was four times the request of the President and past administrations. But we really do not have a choice. The amount of deaths relating to pollution is rising each year and the damage to our wildlife and natural resources is becoming staggering.

Now we come to the question of who will have to assume the responsibility for the clean up which is going to be necessary. It is going to take a massive effort on the part of government at all levels, industry and the public to combat the problems of pollution. New technology is going to have to be developed to deal with this problem. There has been too much of a tendency in this country to pollute first and then measure the harmful effects later. We must discard that philosophy and engage in environmental planning

P. 5 X1

001559

INSERT I - After AEC Standards (She thought this was on page 5 or 6 but wasn't certain).

④ The good people of Minnesota have challenged this standard and have brought up the question of whether a state has the right to set higher standards than those adopted by the Federal government in the protection of the health and welfare of their citizens. I firmly believe that the state of Minnesota has this right and should question the validity of the current standards set by the Atomic Energy Commission.

*I am encouraged by the recent  
action of the Northern*

at every level.

⌞ The laws which now exist do not fully cope with this problem but the Congress is making a fine effort to introduce legislation to cope with the problem. ⌞ I am proud to say that much of the effective legislation that now exists has been sponsored by members of the Democratic party over the past six years.

⌞ In many instances the Federal government has not assumed its proper role in dealing with environmental problems. ⌞ A case in point is the controversy in which the ~~good~~ people of Minnesota are involved and that is the discharges into the waters of Minnesota by the nuclear power plants which are being built in the state. ⌞ The Atomic Energy Commission has held that it ~~has~~ is not responsible for thermal effects from nuclear power plants. ⌞ The states have set thermal standards under the Federal Water Pollution Control Act but these standards vary from state to state and may not deal adequately with the problems in a particular environment resulting from thermal pollution. ⌞ Many species of marine life cannot exist beyond a certain temperature and the food chain of marine organisms may be broken from the effects of thermal pollution. ⌞ A Federal standard should be set in regard to thermal pollution and the states should be ~~able~~ able to raise that standard if they so chose. Nuclear power plants use a great deal more water than conventional power plants and the temperatures involved in heat exchange from the reactors are much greater than conventional power plants.



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Perhaps even more dangerous than thermal pollution is the discharge of radioisotopes into the waters of our nation by nuclear power plants.

Some of these isotopes have a half life of approximately twelve years and will only reach stability after twenty four years. Tritium is one of these radioisotopes and there will be a discharge of this substance

into Minnesota waters from nuclear power plants. The Atomic Energy Commission has set its standards from those which have been adopted from

the International Radiological Council. The standards are based on studies which were made at Hiroshima over twenty years ago and there has

been a great deal of controversy about whether these standards are safe by many members of the scientific community. Yet the standards are

still accepted and power plants are licensed to operate under them.

The danger to human life from the presence of radioisotopes in our waters still needs greater evaluation ~~as far as I am concerned~~. Technology or the lack of it comes into play here because adequate methods of controlling such radioisotopes ~~such as tritium~~ have not been developed. Tritium is

basically a single molecule of hydrogen which combines with water to form heavy water. It is difficult to separate and therefore the alternative has been to simply discharge it into the water as part of the cooling process of nuclear reactors. Its effects on unborn children in causing deformities and on marine organisms in causing mutations has still to be fully determined.

It is my understanding that one in ten thousand adults can suffer from gene decay as a result of the ingestion of tritium. Are we to take chances

with such deleterious substances because technology has not been developed to cope with such dangers? I think not.

- 6 -

I do not subscribe to the theory that industry is fully to blame in not developing safety measures to cope with pollution. Research in these areas is expensive and the government has not fulfilled its role in conducting the necessary research and helping industry to cope with development of safety devices. The Atomic Energy Commission is responsible for the health and safety of the people of the United States in nuclear research and development and surely it is incumbent upon the AEC ~~them~~ to develop technology to protect the public from the harmful effects of radioisotopes. ~~However, Congress must assign these powers to the Agency and it has not done so.~~ Before any power plant is licensed I feel that an environmental study should be conducted in the particular area where that plant is to be located and the effects on the particular environment should be tested. ~~This should be done before any plant is licensed to operate and~~ safety devices should be required in the construction and design of these plants. ~~It is unfair to expect industry~~ to undertake such studies without the assistance of government and this is true in matter of automobile pollution, industrial air pollution, sewage treatment and in the many other critical areas in which we are faced with serious threats to our environment. Government must clean itself up first and reevaluate its role in the environmental crisis. There is no doubt that the consumer will have to pay part of the cost of development of a clean environment but the government must lead the way in setting basic standards which protect the health of our people and by close cooperation with leaders of industry and the public.

Environmental Research Industries

INSERT II - (To be worked into page 6.)

x<sup>2</sup> The present <sup>actual</sup> administration feels that industry  
must pay for the clean up. <sup>but</sup> They also feel that

enforcement must be effective at the state level. *With this*

*I agree,*

*But,* if the states do not have the cooperation

of the Federal government in determining the

proper methods of enforcement and the areas in

which improvements could be made in safety factors

and in monitoring effects from all forces of

pollutants, enforcement on a local level will

not be effective or possible.

Industry must build in the appropriate safety

devices to stop the pollution of our environment

but industry at present does not have <sup>all the</sup> the technology

*needed* to do the job, ~~We cannot wait 30 years for~~

~~improvements to be made. We need improvements now,~~

*can + should undertake*

~~and the Federal government must undertake its~~

*assume*

<sup>1</sup> responsibility in assuring that such technology is

developed swiftly.

*(Research Institutes)*

The public must pay the price anyway in the cost of their own health and I think the protection of the lives of our people is a primary concern.

We are faced in the future with the population problem. Our population is doubling every ~~xxxi~~ thirty five years and we shall have to feed these people and house them. That is why the conservation of our natural resources is no longer a matter of speculation -- it is a necessity and the ~~death~~ rising death rate due to pollution certainly makes us more than aware that corrective measures must be taken now.

✓ Coalition Clean Environment  
✓ International Cooperation  
- International Environment  
Decade.



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