Cancellation is also opposed by the Helium Society, an organization composed in part of scientists and technologists who use helium in their work. Opponents of the cancellation aver that Russell's finding of declining helium use was based on Government uses. Military use is down slightly, and the curtailment of the space program, the Government's largest helium user, has contributed heavily to the decline.

But, say proponents of the conservation program, nongovernment use is rising, and as such things as gas-cooled nuclear reactors, magnetohydrodynamic power generators and superconduting electrical systems come into wider use the demand for helium will increase dramatically.

"The 1960's may well be remembered as the era of developing helium technology," Charles Laverick of the Argonne National Laboratory told the Senate Interior Committee on March 23. "Its potential uses may be so valuable that, for some time at least, it may become essential for the well being of future generations."

In his message declaring the termination of the conservation program Russell pointed out that if helium use should increase there are resources of helium connected with deposits of gas that is useless for fuel. These are likely to stay underground until the helium is needed. Proponents of the present conservation program reply that the very fact the gas is useless for fuel means it is likely to stay underground regardless of the need for helium.

Proponents of helium conservation also point out another reason why the Government is eager to halt the conservation program: finances. To amortize the cost of the stockpiling, the Bureau of Mines sells helium at \$35 per thousand cubic feet. The cost of extraction runs between \$15 and \$19 per thousand cubic feet so private well operators who do not have the stockpile overhead can make a good profit and undersell the Government at \$25 a thousand cubic feet. The Government at one point tried to make subcontractors for the Department of Defense and the National Aeronautics and Space Administration buy only Government helium, but that was declared illegal. Now even the Government's own contractors buy private helium, and the Government program is running a deficit

The court in Kansas will hear arguments by the private companies that Russell's cancellation order violates the Environmental Protection Act. Use of helium instead of other substances that could do some of the same jobs is ecologically recommended since helium is virtually nonreactive chemically and therefore nontoxic, noncorrosive and nonpolluting.

Clear prose, strained tone

A critique

The nation's manifold problems, whether air and water pollution, urban blight, poverty or even something so highly specific as automobile exhaust emissions, appear to be so complex the citizen throws up his hands in despair. There often seems to be no way out.

But sometimes there is evidence the complexity is, if not an illusion, certainly an excuse for inaction. A report on water pollution issued last week by Ralph Nader's Center for the Study of Responsive Law suggests this is the case with the agencies, Congressional committees and state and local governments that deal with the problem. In its style, the highly readable, nontechnical report is certainly the sort of thing needed to replace the obtuse Federal agency reports and ponderous Congressional hearing transcripts that to date have been the main sources of information on water pollution. Its clear prose makes the problem involved sound manageable and understandable, and with today's torrent of environmental verbiage this is high virtue.

But the Nader report, in its predictable zeal to find villains, if not factually inaccurate, often neglects to mention or emphasize recent actions by these alleged malefactors that put them in a far better light. And its punitive recommendations may be, for various reasons, inappropriate.

The report's fault is that it was apparently set on a polemic course when research began on it two years ago, and moderating the course in the light of new events was not in the Nader tradition.

A strong emphasis in the report, for instance, is to require industry to clean up its wastes before it dumps them into municipal sewer systems, and the report faults the Environmental Protection Agency's Water Quality Office for not devoting more of its research, development and demonstration (RD&D) efforts in this direction. But Allen Cywin, assiistant director of woo's RD&D branch, claims Curtis L. Kehr, a graduate student who spent a summer two years ago researching the branch for Nader, "couldn't possibly appreciate what we were doing." Says Cywin: The RD&D program was only two years old then and just barely under way. Since, he claims, there have been numerous programs for treating industrial wastes in-house before the effluent is dumped into municipal systems. These include, among others, projects for converting citrus and packing-house wastes into animal feed, refining sugar beet wastes to fertilizer and recapturing phenols from refinery wastes and sulfides from tannery wastes. "Our whole industrial program is aimed at recycling," says Cywin, and this is exactly the goal supported by Nader.

Perhaps the contradictions of the report are most evident in its discussion of another kind of recycling, the use of municipal sewage for irrigation and fertilizer and to reclaim marginal soils. The Nader report praises at length a Muskegon County, Mich., plan to use such techniques on a large scale for the first time. Then it admits that woo is financing a major part of the Muskegon project. It provides abundant detail on the political finagling which was required to get the woo grant for the project against concerted resistance on the state and Federal levels. But whether or not this recalcitrance to adopt a major new technology existed in woo, the fact is the agency did finally fund the project. It may have been a villain two years ago, but as of last September when the grant was announced, it was no longer so. Hashing over past sins seems particularly fruitless.

There is little disagreement among environmentalists, however, that woo has been locked into either making marginal improvements on existing 50year-old technology, that will not meet today's goals, or upon giving a Space Age veneer to its RD&D efforts. Some of them said so at a recent League of Women Voters-Public Broadcasting Corp. seminar on water pollution. Dr. Howard A. Tanner of Michigan State University, for instance, stressed the need for recycling and deplored as a contradiction to this goal a woo emphasis on getting industry to pay municipalities for accepting their effluents. Thus, it is possible that Kehr captured better than Cywin admits what was going on in woo. But the evidence, especially since the Muskegon grant, is that important new directions are evolving and that woo deserves credit for them.

Another apparent contradiction in the report is its strong emphasis on punitive enforcement. The report admits the Muskegon-type technologies have not been proven operationally. But it nevertheless calls for vigorous enforcement action to get industries and municipalities to clean up their effluents—or divert them away from waterways—immediately.

This moralistic emphasis on enforcement is the philosophical backbone of the report, and, unfortunately, also its major flaw. Nader has a unique ability to pierce through to the essence of many of the nation's problems, and his report makes it clear the complexities of water pollution are not insuperable. But he would perform a greater service if he would not allow his moral philosophies to color his selection of facts.

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