## No One Answer To Pollution Solution

Getting rid of pollution in one respect often creates other undesirable effect, says an agricultural economist at Penn State University.

Dr. Donald J. Epp finds this "trade-off" between alternatives may exist in four aspects — between environmental quality and other needs, between geographical areas, within the various parts of the environment, and in degrees of environmental cleanliness.

Just as a family must sometimes choose between alternatives, society must make choices in the kinds of pollution it accepts, he said.

"I think we will face rather quickly the trade-off between environmental quality and other needs," he declared.

"As we . . . continue working on environmental problems, we must make known the alternative ways of getting whatever benefits people want from the environment. These are as important as knowledge of the standards for environmental quality," he said.

Dr. Epp described a Federal government estimate of \$105.2 billion needed over the next 6 years to clean up the environment thoroughly. This amounts to about \$17.5 billion dollars annually.

People will ask whether this is the best way to spend the money. They may point out that this money could double expenditures of all state and local governments for police protection, correctional institutions, and public assistance, he said.

The \$17.5 billion is about twothirds of what the nation spends annually for all public elementary and secondary schools. A two-third increase in financing for school systems might improve communities substantially. Cleaning up streams could also improve communities. The people must decide which expenditure will be made.

The "trade-off" in geographical areas could prove equally serious for some Pennsylvania industries, he claimed. Certain industries may be compelled to move elsewhere because of high costs required to meet strict environmental standards. Increased standards for one stream receiving sewage effluent from a paper mill will raise production costs for sewage treatment by \$17.80 per ton of product. This is almost 6 times the current cost for sewage treatment.

Unless the company has other advantages for remaining, they will most likely move to another state, Dr. Epp predicted. Is the resulting improvement in environmental quality worth the loss of jobs, he asked. This is a "tradeoff" that should be considered.

"Alternatives" between different parts of the environment were also discussed. Cleaning up raw sewage from a stream by installing sewage treatment plant and then burning the resulting sludge takes "dirt" out of the water and puts it in the air. Burning of refuse instead of using land fill is another example of "trade-off" from soil and water pollution to air pollution.

Dr. Epp said a fourth "trade-off" exists in degree or extent of pollution. He claimed the natural environment consists of various degrees of cleanliness. Pollution is not strictly a man-made activity and the natural state of environment is not absolutely clean.

Man can use the environment to dispose of many waste products and the environment will clean it up provided the system is not overloaded, he said.



