

RFD 1 Box 472 Culpeper Va. 22701

Dear Mr. Lederberg,

June 7, 1970

Re your piece in the Post June 6, about phosphorous etc.

1.. Much of the excess phosphate in waste discharge, I believe to be due to too much added to wash water. Maybe the kitchen supply should be in a diluted sprinkle-bottle. A friend of mine who was stationed in Heidelberg years ago, before non-foaming detergents were used, told me the Necker river almost ran foam over the banks.

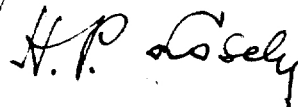
2. I share your interest in returning all intestinal waste - human and animal - to the land. I have lived in several places in Switzerland where we had no waterborn sewage, but simple tight tanks of ample size, periodically pumped out to wooden tanks on carts and spread on fields. The slurry was sometimes used to spread on dormant vegetable gardens and hoed in - perhaps dried leaves or other vegetable matter dug in and left for bacterial digestion/ Very little artificial fertilizer was used.

3. City sewage can be pumped and treated as done in Milwaukee. Why not experiment further; presumably your suggested tertiary treatment would take the more or less clear effluent after secondary sludge separation, and either by trickle or pumping in air in fine bubbles, bring it to a good BOD state fit to discharge to stream or use for irrigation or dump in a deep sand filter bed.

4. I suppose you know the case for using plain finely ground rock phosphate rather than treating it with sulphuric acid. Myself, I simply add a pail of rock phosphate to each spreaderload of manure. I do use lime and potash. My corn leaves never show signs of phosphorus shortage.

I should be glad to see you follow up the subject in your column. Part of our troubles of inflation are due to our ignorant and careless use of natural resources.

Sincerely



H.P. Losely