

Further, the regulation does not now propose to monitor groundwater at application sites since careful control is to be maintained over the sludge at the point of generation and during application. It is evident that major engineering renovation of a farm field would be extremely difficult and expensive to conduct, and as a consequence, it has been decided at this point that the control of the sludge is absolutely necessary and that groundwater monitoring will not be required. Certain storage constraints are included in the regulation to eliminate the possibility of groundwater contamination from storage sites.

In summary, after long years of study, there is progress in the formulation of regulations for the use of sludge and septage in agricultural land. There are a great many people interested in this activity in these environmentally conscious times so, it is unlikely that the resulting regulations will please all users of the regulations, including farmers. Any regulation will be a set of compromises, particularly those which deal with public health problems. The regulations do appear to cover most critical issues, perhaps at the expense of convenience for treatment plant operators and farmers. It is progress to think that this potential resource may be available for appropriate use on Massachusetts farms. If you are interested in the development of these regulations, you can contact Ms. Fifi Nessen, Division of Hazardous Waste, Department of Environmental Quality Engineering, One Winter Street, Boston, Massachusetts, 02110, for further information.

## SEWAGE SLUDGE AS A FERTILIZER FOR SILAGE CORN

*Allen V. Barker  
Department of Plant & Soil Sciences  
University of Massachusetts*

Corn (Wisconsin 335A) has been grown on a fine sandy loam at the University of Massachusetts Research Farm at South Deerfield and fertilized with municipal sewage sludge, with conventional chemical fertilization, or with combinations of sludge and chemical fertilizers. Digested liquid and raw, vacuum-filtered sludges have been used. Sludges and chemical fertilizers appear to support about equal yields of silage production, averaging about 17 to 18 tons per acre each year for the past four years. Sludges which have been used are from Amherst and Sunderland and are considered to be domestic sludges. They are low in toxic metals, and accumulation of toxic metals does not appear to occur in the silage. No feeding trials with livestock have been made with this silage.