OVERVIEW

- The U.S. Environmental Protection Agency (EPA) will continue to promote practices that provide for the beneficial use of municipal sewage sludge biosolids, while maintaining or improving environmental quality and protecting human health.

- Thousands of municipalities are currently land applying or otherwise recycling their biosolids. Both agricultural and non-agricultural sites benefit from the nutrient and soil conditioning value of biosolids, which is generally worth about $100 to $140 per agricultural application of biosolids. Biosolids have been used successfully in the production of many different food, feed, and horticultural crops; in the production of sod and the maintenance of turf; for improved forest productivity; and for reclaiming and revegetating areas disturbed by mining, construction, and waste disposal activities.

- EPA continues to provide guidance and rules for the safe use of biosolids. Its current rule for the final use or disposal of biosolids (40 CFR Part 503) is the result of nearly 10 years of intensive study and development. This process involved detailed scientific risk assessment with careful evaluation of the available data, and the use of improved models and more realistic assumptions. It benefited greatly by the extensive assistance of biosolids experts.

- The biosolids now being generated are for the most part low in pollutants, rich in nutrients and organic matter, and highly suitable for recycling as a result of EPA's clean water and pretreatment efforts. The Part 503 standards provide for a wide range of different end-use possibilities for these biosolids.

PURPOSE

This booklet is written to provide an understanding of the great value that can be derived from the beneficial use of biosolids. In addition, it discusses and reaffirms the U. S. Environmental Protection Agency's policy that encourages the beneficial use of biosolids. This booklet then briefly discusses important aspects of its new regulation (40 Code of Federal Regulations Part 503) that govern the final use or disposal of biosolids. It concludes with a discussion of the scientific basis of the rule and names of people and references to contact for additional information regarding the rule and risk assessment.

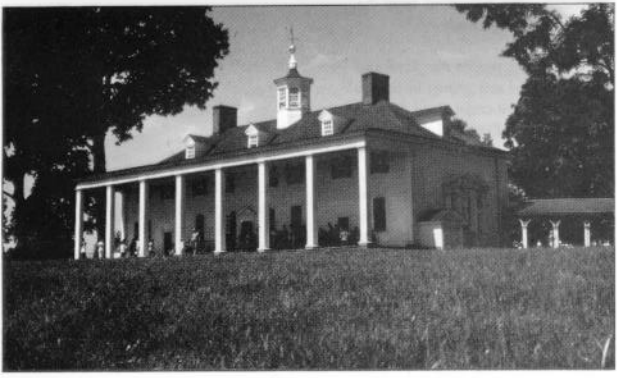
EPA Policy on Beneficial Use of Municipal Biosolids

EPA's "Policy on Municipal Sewage Sludge (Biosolids) Management" (49 FR 24358 June 12, 1984) states that:

> *"The U.S. Environmental Protection Agency (EPA) will actively promote those municipal [biosolids] management practices that provide for the beneficial use of [biosolids] while maintaining or improving environmental quality and protecting public health. To implement this policy, EPA will continue to issue regulations that protect public health and other environmental values... Local communities will remain responsible for choosing among alternative programs; for planning, constructing, and operating facilities to meet their needs; and for ensuring the continuing availability of adequate and acceptable disposal or use capacity."*

As noted in the policy statement, EPA prefers well-managed practices that beneficially use municipal biosolids. Such practices include land application of biosolids as a soil amendment or fertilizer supplement and various procedures that derive energy from biosolids or convert them to useful products. These practices can help reduce the volume of biosolids requiring disposal, thus reducing the rate at which the limited capacity of disposal facilities is exhausted. Other benefits derived from recycling biosolids include improved soil fertility and tilth, reduced need for and enhanced response to inorganic fertilizers, better growth and quality of crops, and decreased consumption of energy.

Silvigrow applications vehicle at the University of Washington Pack Forest facility.



Composted biosolids have enhanced the Mt. Vernon landscape.