

BMP 7

Fertilization

Purpose

This BMP is used to minimize water quality degradation while artificially applying specific chemicals to the soil to favor increased growth of vegetation. The purpose of proper fertilization is to induce desirable, target vegetation to achieve maximum growth practical for site conditions, while managing the fertilizer in such a way as to protect the quality of nearby bodies of water.

Definition

Fertilization enriches the soil to improve the growth of tree plantations or potential high-value natural tree stands or to aid in the establishment of herbaceous vegetation used to stabilize the soil and/or while a tree plantation is becoming established. Fertilizer includes both organic waste and industrially produced liquid and granular or powdered formulations of plant nutrients.

Specifications

The practice of applying fertilizers to areas of commercial forest land as a means of stimulating tree growth has been very limited in Kentucky. Fertilization can be done by either manual, aerial, or machine application of soluble inorganic compounds or through the application of organic waste. Improper use of this practice can result in excessive nutrients in nearby bodies of water and an imbalance in natural aquatic life cycles. Before any application of fertilizer, it is recommended that a soil test be performed to determine what specific soil elements, if any, are lacking.

- **Avoid direct fertilizer application to bodies of water** and to those areas immediately adjacent to them. Nutrient pollution can also be controlled by eliminating excessive fertilizer applications, selection of proper fertilizer formulation, and the proper timing and method of application.
- **The use of fertilizers in SMZs is generally undesirable**, and fertilizer should be applied only in strict compliance with label directions.
- **Use of fertilizer within 30 feet of the bottom** of any sinkhole or noticeable ground opening is undesirable.

The application of some organic materials, such as sludge, can require a permit and compliance with federal and/or state regulations. For more information about permits required for the application of sludge, contact the Kentucky Division of Waste Management.

Regulatory Requirements for BMP No. 7

(See Appendix A for explanations)

- Application of sludge: (may require a permit)
- All silvicultural operations: (410 KAR 5:026, 5:029, 5:030, and 5:031)
- Activities near high-quality waters and outstanding national resource waters: (401 KAR 5:029, 5:030, and 5:031)
- Activities near wild rivers: (KRS 146.200 *et seq.* and 401 KAR 4:100-140)

Summary: AWQA Minimum Requirements for BMP No. 7

The producer should:

- use only the amount of fertilizer necessary, and no fertilizer should be used on bodies of water or those areas immediately adjacent to them.
- avoid using fertilizers in SMZs or within 30 feet of any noticeable sinkhole opening.