MANURE TREATMENT LAGOONS
LIVESTOCK BMP #8

Description:
An impoundment made by excavation or earthfill to biologically treat livestock manure or other agricultural wastes, reduce pollution, and protect the environment.

AWQA Minimum Requirements:
Construct lagoons to biologically treat manure to reduce nutrients in it when manure is not used for fertilizer value, and remove excess effluent by irrigation or hauling if needed. The types of lagoons most common in Kentucky are anaerobic lagoons, aerobic lagoons, and anaerobic/aerobic lagoon combinations.

Recommendations:
Locate near the source of manure. Locate downhill from manure, concentrated livestock areas, feedlots, or other waste generated by agricultural production. Locate out of the floodplain area unless other protective measures are taken. Locate where prevailing winds will minimize odors. Select a site the greatest practical distances from water supplies, streams, and residences. Check soils, rock depth, drainage, and topography for site suitability. Seepage through the lagoon may allow pollutants to move into groundwater. Check and comply with local and state regulation. Consider future livestock expansion, as well as present number, in determining size of lagoons.

Technical References
University Publications
• AGR-165 Agronomics of Manure Use for Crop Production
• AEN-91 Managing Liquid Dairy Manure
• ID-148 Sampling Animal Manure
• IP-57 Potential for Livestock and Poultry Manure to Provide the Nutrients Removed by Crops and Forages in Kentucky
• AGR-146 Using Animal Manure as Nutrient Sources
• AEN-91 Managing Liquid Dairy Manure
• AEN-125 Closing a Liquid Manure Storage Structure

USDA/NRCS Publications
• Practice Code 389 Waste Treatment Lagoon

Funding Assistance Options
State Cost Share
• See your local Conservation District to apply.

Kentucky Ag. Development Fund (KADB/KAFC)
• Select from available program options here.

NRCS Environmental Quality Incentives Program (EQIP)
• Select from available program options here.

Important Considerations
Water Quality Benefit ( Abedic):
• (KEY: =good, =best; see STEPL Model)