OPERATION AND MAINTENANCE PLAN

 FOR

# PHOSPHORUS REMOVAL SYSTEM

A properly operated and maintained **Phosphorus Removal System** is an asset to your property. This system was designed and installed to remove phosphorous drainage tile discharge, thereby reducing nutrients and occurrence of blue green algae. The estimated life span of this practice is at least 10 years. The life span can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following are some requirements to help you develop a good operation and maintenance program.

**Operation and Maintenance**

1. A water sampling and testing schedule shall be established for the inlet flow into the tank before treatment and the outflow from the tank after treatment. Phosphorous (P) concentration levels, pH, and Total Suspended Solids (TSS) will be measured.
2. During the retention time in the tank, P is removed from the drainage water in the first chamber and the pH restored in the second chamber. The P removal media in the first chamber will eventually become saturated with phosphorous and/or the pH restoration media in the second chamber will become ineffective. This is expected to occur once within the practice 10 year life. The water sampling and testing results will show when the media is no longer effective and when it will need the replacement.
3. When the media is no longer effective in removing P or restoring pH, it will have to be replaced. The media shall be disposed in a certified landfill.

**Inspection and Maintenance**

1. This system relies on porous media in the tank to allow for water to flow through. Annually inspect the system to be sure water is still flowing through the media and the system is not clogged with sediment or other obstructions. Clear sediment or obstructions if possible, otherwise contact NRCS.
2. Inspect the outlet of the system to be sure the discharge is not causing erosion. Restore eroding area if feasible and prevent from reoccurring. Contact NRCS if you need assistance.
3. Inspect the headwall and rodent guard of the outlet. Repair or replace as necessary.

**Specific Requirements for Your Practice**

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