

O&M Plan prepared for:  
Date:

## **OPERATION AND MAINTENANCE PLAN** **DENITRIFYING BIOREACTOR**

Denitrifying bioreactors use a carbon source for the removal of nitrate nitrogen from agricultural drainage water. The estimated life span of the installation is at least 10 years. The life of this conservation practice can be assured and usually increased by developing and carrying out a good inspection and maintenance program including the following requirements:

### **OPERATING REQUIREMENTS**

- Install flashboards in control structures to maintain the designed water level within the bioreactor prior to field application of nutrients or chemicals.
- Remove flashboards from control structures when necessary for removal of excess soil moisture.

### **GENERAL REQUIREMENTS**

- As a minimum inspect structures annually and after major storm events.
- Remove all debris and sediment that may accumulate near the structure.
- Remove any obstructions or blockages from structures and pipelines.
- Inspect structural materials for signs of deterioration or damage. Replace or repair as needed.
- Inspect the condition of the bioreactor media and replace or replenish as needed.
- Eradicate or otherwise remove all burrowing animals. Immediately repair any damage caused by their activity.
- Control the growth of brush or other undesirable vegetation.
- Inspect drainage systems for proper functioning. Ensure animal guards are in place and outlets are free of obstructions and blockages.
- Inspect for signs of settlement or displacement.
- Immediately repair any vandalism, vehicular, or livestock damage to any structures or appurtenances.