

NATURAL RESOURCES CONSERVATION SERVICE

VIRGINIA

OPERATION AND MAINTENANCE REQUIREMENTS

IRRIGATION WATER MANAGEMENT

CODE 449

Land Owner/Operator _____

County _____ SWCD _____ Farm/Tract No. _____

Prepared By _____ Date _____

OPERATION AND MAINTENANCE ITEMS

A properly executed irrigation water management plan can be an asset to the farm. The system installed on your farm was designed and installed to support crop growth by meeting crop irrigation requirements. Estimated life span of this installation is at least 10 years. The life of the system can be assured and usually increased by developing and carrying out a sound management program and by following a systematic operation and maintenance program.

Your irrigation water management program includes:

- Follow the Operation and Maintenance plans established for the components of the system.
- **Base** the volume of water needed for each irrigation application ~~shall be based~~ on plant available water holding capacity of the soil for the crop rooting depth, allowed soil water depletion, irrigation efficiency, and water table contribution.
- **Base** the irrigation frequency ~~shall be based~~ on the volume of irrigation water needed and/or available, the rate of crop evapotranspiration, crop needs, and effective precipitation.
- **Base** the application rate ~~shall be based~~ on the volume of water to be applied, the frequency of irrigation applications, soil infiltration and permeability characteristics, and the capacity of the irrigation system.
- Modify plant populations, crop and variety selection, and irrigated acres to match available or anticipated water supplies.
- Consider potential for spray drift and odors when applying agricultural and municipal wastewaters.
- **Consider** equipment modifications and/or soil amendments such as polyacrylamides and mulches ~~should be considered~~ to decrease erosion.
- **Consider** quality of irrigation water ~~should be considered~~ relative to its potential effect on the soil's physical and chemical properties, such as soil crusting, pH, permeability, salinity, and structure.

