



# GOLF TURF NEWS

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## ***A New Florida Statute Requiring Antisiphon Devices On All Irrigation Systems***

A new statute (487.055) has recently been passed by the Florida legislature requiring the installation of antisiphon devices on all irrigation systems that inject chemicals into the irrigation water. This statute includes all golf courses that inject fertilizers into the irrigation system (fertigation). The Florida Irrigation Society and other groups have worked to make this a fair and equitable bill to help prevent ground water contamination.

All irrigation systems now under construction are required to incorporate an antisiphon device into the system immediately. All existing irrigation system have 18 months to install an antisiphon device.

The following is a copy of the new statute (487.055), definitions (487.021), and diagrams of the antisiphon device assemblies.

Section 17. Section 487.005, Florida Statutes, is created to read:

487.055 Antisiphon requirements for irrigation systems. —

(1) Any irrigation system used for the application of chemicals shall be equipped with an antisiphon device adequate to protect against contamination of the water supply, provided that an irrigation system installed prior to the effective date of this act shall be equipped with such device within 18 months from the effective date of this act.

(2) It shall be unlawful for any person to apply chemicals through an irrigation system which is not equipped with an antisiphon device as required by this section.

(3) The department shall establish specific requirements for antisiphon devices by rule. The department shall adopt such rules on or before November 1, 1984.

(4) Any governmental agency requiring antisiphon devices on irrigation systems used for the application of chemicals shall use the specific antisiphon device requirements adopted by the department.

487.021 Definitions. —For the purpose of this chapter:

(7) "Antisiphon device" means a safety device used to prevent backflow of a mixture of water and chemicals into the new water supply.

(10) "Chemical" means any substance which is intentionally added to water for agricultural purposes.

(19) "Emergency exemption" means an exemption as authorized in Section 18 of the Federal Insecticide, Fungicide and Rodenticide Act.

(32) "Irrigation system" means any device or combination of devices having a hose, pipe, or other conduit which connects directly to any source of ground or surface water, through which water or a mixture of water and chemicals is drawn and applied for agricultural purposes. The term does not include any handheld hose sprayer or other similar device which is constructed so that an interruption in water flow automatically prevents any backflow to the water source.

5E-2.30 Antisiphon Requirements for Irrigation Systems

(1) Definitions

(a) The term "antisiphon device" means a safety device used to prevent backflow of a mixture of water and chemicals into the water supply.

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(b) "Toxic Chemical" means any pesticide whose label bears the signal work "Danger" or "Poison".

(2) Antisiphon Device System, General. Any irrigation system designed or used for the application of chemicals shall be equipped with the following components:

(a) Functional check valve on the irrigation pipe. This valve shall be located in the irrigation supply line between the irrigation pump and the point of injection of chemicals. This valve, when installed, shall be on a horizontal plane and level. A deviation of not more than 10 degrees from the horizontal shall not be set.

(b) Low pressure drain. Such drain shall have an orifice size of at least  $\frac{3}{4}$  inch diameter. It shall be located on the bottom of the horizontal pipe between the functional check valve and the irrigation pump. It must be level and must not extend beyond the inside surface of the bottom of the pipe as shown. (Example, Diagram 3). The outside opening of the drain shall be at least two (2) inches above grade.

(c) Vacuum breaker. A vacuum breaker shall be installed on the top of the horizontal pipe between the functional check valve and the irrigation pump and opposite to the low pressure drain. The vacuum breaker shall have an orifice size of at least  $\frac{3}{4}$  inch diameter.

(d) Functional check valve on the chemical injection line. A check valve shall be installed on the chemical injection line. If injector pumps are used, they shall be installed so that when water flow ceases, the injector pumps will not operate. A method shall be provided for positive shut off of the chemical supply when the injection system is not in use.

(3) Antisiphon System, Specific:

(a) A single antisiphon device assembly (Example, Diagram 1) shall be used for those systems where non-toxic chemicals such as fertilizers will be injected.

(b) A double antisiphon device assembly as shown (Example, Diagram 2) shall be used for those systems where toxic chemicals will be injected. The functioning of each device in the double assembly system must be capable of being checked independently of each other to insure effectiveness of the system.

(4) Chemical Storage Tanks. Tanks shall be constructed and maintained in a manner to insure containment of the chemical and to prevent contamination.

(5) Variances.

(a) None of the antisiphon device components shall be altered in any manner which would render the antisiphon system inoperative or ineffective.

(b) AN IRRIGATION SYSTEM WHERE ONLY FERTILIZER IS INJECTED INTO THE IRRIGATION PIPES AND WHERE SURFACE WATER IS THE ONLY WATER SOURCE, AND WHERE BOTH A CHECK

VALVE ON THE OUTPUT SIDE OF THE PUMP AND A FOOT VALVE AT WATER INTAKE IS PRESENT, WILL BE APPROVED AS A VARIANCE TO THE RULE.

(c) Specific variances of equipment not covered by this rule but which may be in compliance with this rule shall be considered on a case by case basis by the department.

(6) Maintenance. All check valves, low pressure drains and vacuum breakers shall be maintained free of corrosion or other build-up and operative at all times during operation of the system. Cleaning agents used exclusively to maintain or clean an irrigation system shall not be subject to the regulations provided for herein.

(7) PENALTY. ANY PERSON WHO SHALL USE ANY IRRIGATION SYSTEM FOR THE APPLICATION OF CHEMICALS, WITHOUT THE REQUIRED ANTISYPHON DEVICE INSTALLED OR WITHOUT THE ANTISYPHON DEVICE IN OPERATING CONDITION, SHALL BE SUBJECT TO AN ADMINISTRATIVE FINE NOT TO EXCEED \$1,000 FOR EACH VOILATION.

Specific Authority: 570.07(23) FS.: Laws of Florida, Ch. 84-388, Sec. 17 (Sec. 487.055(3) FS.)

Law Implemented: Laws of Florida, Ch. 84-388, Sec. 17 (Sec. 487.055 FS.) ■

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