

Drip/Micro Irrigation Irrigation Consumer Bill of Rights™

Note: This supplements the General Irrigation Consumer Bill of Rights™. Discuss these items with your irrigation dealer before purchasing your irrigation system. The discussion will help you to make wiser selections of design options, and to appreciate the obligations of both yourself and the dealer in creating your irrigation system.

Filtration

- What is the equivalent mesh size?
- How frequently will filter flushing be necessary, and how much water will be used per flush?
- How will the flush water be disposed of?
- Does this filter require prefiltration?
- How often must the filter be taken apart for cleaning or servicing?
- If this is a media (sand) filter, how easy is it to remove the sand? How often will the sand be replaced?
- How is this filter protected from corrosion on both the inside and outside?
- Does the pump provide enough water to flush the filter and operate the irrigation system simultaneously?
- Is a separate valve needed downstream of the filter to sustain backflush pressure?
- What are the initial adjustments necessary for the filter, and who will make them?
- Through what variation in flow rate can the filter be effective?
- Is a backup filter for safety required downstream? How will it be flushed, what are its mesh requirements, and where will it be located?
- If a backflush flow adjustment is necessary, is it possible to view and sample the backflush water in order to make proper filter adjustments?
- What is the safe operating pressure of the filter?
- What is the minimum pressure required for good backflushing?
- How much pressure loss is there through the filter when clean, and when dirty?

Flow Rates and Pressures

- What is the minimum pressure anticipated at any emitter?
- What is the average emitter flow rate and pressure?
- How are pressures regulated throughout the system?
- Do pressure regulators require any adjustments?
- Do pressure regulators with pilot valves have large, external, easily-cleaned filters?
- What is the thickness of the tape/hose, and how much pressure can it practically withstand?

General Reduction of Plugging

- Is insect damage to emitters a problem in the area? How will the design minimize that problem?
- If this is a buried drip system, are the emitter outlets designed to minimize backsiphonage of soil?
- Are adequate flushouts provided throughout the whole PVC system to clean the pipes before the hoses/tapes are pressurized?
- Has the designer shown the results of a hydraulic analysis demonstrating there will be a hose/tape flushing velocity of at least 1.5 ft/sec at the downstream end of the hose – given the end connections and the upstream pressures?
- If used, can in-field filters and hose screen washers be easily cleaned?

Chemical Injection

- What type of chemical injection is needed to minimize emitter plugging?
- Has the water been tested for pH, iron, manganese, and sulfur bacteria problems?
- What equipment components can be damaged by injected chemicals?

General Agronomic

- What percentage of the soil volume will be wet?
- Are any chemical additives needed to minimize water runoff from the soil surface?

The Irrigation Consumer Bill of Rights (ICBR) was developed by:



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