



**Count on it.**

## Micro-Irrigation Business

July 8, 2008

Dear Valued Customers,

Summer is the time for many things, including **drip irrigation system maintenance**. Many drip systems have adequate filtration, chemical injection and flushing capabilities, but extra attention and diligence may be required this season. This is because growers are reporting that water and fertilizer quality is worse than ever before, creating a challenge for even the most experienced drip irrigators.

The attached document, "A Systematic Approach to Optimizing SDI Operation and Maintenance" was recently presented at the ASABE meeting in Reno and may be helpful. It provides information on several important topics and serves as a reminder that irrigators should:

1. **Routinely monitor system pressures and flows** and compare them with target readings. If pressure or flow is too high or too low, several different problems may be occurring, such as leaks or clogging. Use the System Troubleshooting Guide on page five if the cause is not readily apparent.
2. **Apply maintenance chemicals** if warranted to control pH and/or to control organic matter. Remember that pH control is especially important if chlorine is injected – at higher pH it is not effective. See page nine for a list of problems and treatment options.
3. **Flush the system** at a high enough velocity and long enough duration to cleanse submains and laterals of debris. Flushing inlet pressures and flows may be significantly different than normal irrigation pressures and flows – refer to the charts on page 13-15 for guidance. Inadequate flushing will waste time and resources, create a false sense of security, and may lead to clogging that could have been prevented.
4. **Control pests** such as insects or rodents that damage drip lines and electrical wires. Many strategies are presented on page 15, and excellent pictures are available in the second attached document, "Diagnosing and Avoiding Damage to Drip Tape" prepared for the Irrigation Association by the Irrigation Training and Research Center, Cal Poly, San Luis Obispo.
5. **Apply fertilizers properly** by injecting upstream of the filter, and performing a jar test prior to injection to insure compatibility with the water source and other fertilizers. In addition, refer to the Fertilizer Compatibility Chart on page 19 for an indication of whether certain combinations will create clogging problems. Fertilizer quality can change from year to year, and even batch to batch. Checking compatibility cannot be over emphasized!

Every situation is different, so it's not unusual to need help. Give Toro's staff a call if you'd like to discuss system maintenance, or any other irrigation related topics - we look forward to your call.

Have a productive, safe summer!

Sincerely,

The Toro Company, Micro-Irrigation Business

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