

# IRRIGATION CONSUMER *Bill of Rights*

## AGRICULTURE

Note: This supplements various Bills written for specific irrigation methods. 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.

### Designer Qualifications

- What are the dealer credentials (formal training, references, designer certification by the Irrigation Association, contractor's license, and/or professional agricultural engineer registration)?

### Design Features

- What is the life expectancy of system components?
- What safety features have been included?
- What are the options for future upgrades?
- What is the recommended list of spare parts?

### Specific Operating/Design Parameters

- What will be the distribution uniformity of the whole field when brand new?
- Does the system provide climate control?
- Water requirements
  - What are the peak daily needs (acre-inches) for a normal year?
  - What is the system delivery capacity in 24 hours (acre-inches)?
  - What is the anticipated amount of water to be used per year (acre-feet)?
  - If the field has plants with different spacings, ages, or varieties, what is the recommended procedure to provide the appropriate amount of water per acre per week to each block?
- Energy consumption
  - Is it possible to pump all water during off-peak hours?
  - What are the pump and motor/engine efficiencies?
  - Are you provided with a pump curve showing the GPM and pressure?
  - What is the sensitivity of pump flow rates to well water level changes?
  - What is the energy cost per acre-foot?
- Filtration
  - Is filtration necessary, and if so, what type is provided?

- Chemical injection
  - Are locally required backflow prevention and safety devices provided?
  - What is the capacity of the injector, in gallons per hour?
  - Can the equipment inject both fertilizers and other chemicals?
- Flow meter
  - Does it measure both flow rate (GPM) and volume (acre-feet) applied?
  - Does installation follow the manufacturer's recommendations with regard to lengths of straight pipe, pipe diameter and straightening vanes?
- Pressure, air, and flushing
  - Are there adequate continuous air vents, vacuum relief valves, and flushouts?
  - What are the number, type and size of pressure relief valves?
  - Is the pressure rating of all system components sufficiently high for the anticipated water temperature, surge pressures and normal pressures?

### Warranties

- Who provides equipment installation, start-up, and adjustment?
- What are the warranties on individual components and "system" design performance?
- Who is providing warranties and what do the warranties cover and exclude?
- Are the providers financially capable of standing behind their warranties?
- What is the availability of replacement parts?
- Is a packet provided containing manufacturers' literature, warranties, and operation instructions for the system?
- Is the irrigation dealer a "full service" dealer?

