

CHAPTER 6 FLOW METERS AND TELEMETRY UNITS

1 Requirements

- 1.1. Flow meters must be permanently installed on all regulated wells within the District, except range livestock wells and commercial wells serving feedlots, prior to the use of any ground water. The landowner, ground water user or operator may request an exception from the District for good cause shown.
- 1.2. In the event of commingled water being pumped through one system, alternatives must be used to determine accurate ground water usage. Landowners shall have the option of installing a negative meter on the system to record the amount of surface water prior to commingling that water with ground water. The two flow meter reads obtained by the District will be used to calculate the actual ground water usage. If a landowner does not install a negative meter or does not provide the District with the necessary records, the District will consider all water through a flow meter as ground water.
- 1.3. The District has adopted a Flow Meters Policy Statement listing the flow meter brands that have been approved by the Board for installation and use within the District. A copy of this Policy Statement is available at the District office located at 100547 Airport Road, P.O. Box 280, Scottsbluff, Nebraska 69363. Only those flow meters included on this list are allowed to be installed and used.
- 1.4. Flow meters on the District approved list will be considered conforming flow meters, provided the requirements set forth in the remainder of this Chapter are met. Any flow meters that are not on the approved list of flow meters shall be designated as non-conforming flow meters. If a conforming flow meter cannot be installed, application for exception must be made to the District and approved prior to installation.
- 1.5. Flow meters installed prior to January 1, 2012, on a regulated well or irrigation system that are not included on the list of approved flow meters are considered non-conforming flow meters. These flow meters may remain installed on regulated wells and used until such time as they are no longer able to be repaired and brought into working order to accurately measure the amount of ground water withdrawn from the well. When this situation occurs, the flow meter must be replaced with a flow meter included on the approved list of flow meters and must conform to the specifications contained herein.

2 Specifications

- 2.1. Each flow meter must be installed in a location easily accessible to District personnel. The flow meter size, serial number and, if available, the direction of flow must be clearly stamped on the body of the meter. Each flow meter must have a District seal installed by District personnel.
- 2.2. Each flow meter must be installed according to the manufacturer's specifications and calibrated to the pipe size. Calibration must maintain an accuracy of plus or minus two percent (2%) of normal flow range. The inside pipe diameter for which the flow meter has been calibrated must be clearly shown on the flow meter to at least the nearest 0.01

of an inch.

- 2.3. The flow meter registry must have a visual volume-recording totalizer that shall record the volume of ground water withdrawn in acre-inches for irrigation wells and in gallons for other regulated wells. The flow meter registry must also be protected from the elements.
- 2.4. Totalizers must have sufficient capacity to record the quantity of ground water withdrawn from each regulated well for a period of one (1) year. Totalizers must be direct reading and the multiplier by which the rate of flow can be determined by timing must be clearly indicated.
- 2.5. Backflow prevention devices are required where reverse flow occurs through the flow meter.
- 2.6. Flow meters must be capable of measuring all the ground water withdrawn from each regulated well, or from all regulated wells connected in a series, for each certified use.

3 Purchase

- 3.1. Landowner or ground water user shall be responsible for the purchase of any flow meter to be installed on any regulated well serving their lands. Landowner shall purchase a Board approved flow meter as detailed in the District's Flow Meters Policy Statement and that meets the specification requirements described in this Chapter.
- 3.2. The District shall be responsible for the purchase of any telemetry unit to be installed on any flow meter within the District.

4 Installation

- 4.1. Landowner or ground water user will be responsible for installing a flow meter in accordance with this Chapter.
- 4.2. District personnel must install a District seal and take an initial reading of the flow meter following the installation of any flow meter and prior to the withdrawal of any ground water from a regulated well. The landowner, ground water user or authorized operator must obtain approval from the District prior to removal of the District seal for any reason.
- 4.3. For each certified use that requires a flow meter, the amount of ground water withdrawn must be measured by a separate flow meter, prior to the withdrawal of any ground water for the certified use(s).
- 4.4. In cases where multiple wells serve one irrigation system, the flow meter may be installed on the irrigation system instead of on each regulated well serving the irrigation system.
- 4.5. The District will be responsible for installing any telemetry unit to be connected to a flow meter.

5 Ownership

- 5.1. Landowner or ground water user shall be the owner of any flow meter installed and shall be responsible for any costs of operation, maintenance, repair and replacement of the

same, notwithstanding any costs incurred due to the negligence of District personnel during the course of any District activities relating to the reading, installation, inspection, repair or replacement of a flow meter or telemetry unit.

- 5.2. This District shall be the owner of any telemetry unit installed on any flow meter within the District and shall be responsible for any costs of repair and replacement of the same, except any costs incurred due to the negligence of the landowner or the landowner's authorized operator during the course of operation or activities on the respective lands.

6 Operation, Maintenance, Repair and Replacement

- 6.1. As detailed in the District Flow Meters Policy Statement, District staff will perform regular maintenance on select flow meters through the flow meter maintenance program, unless landowner, ground water user or authorized operator specifically opts out of the program. However, landowner, ground water user or authorized operator shall be responsible for maintenance of the flow meter, including, but not limited to, clearing any debris build up, vegetative growth or any other material that would impede operation, performance, maintenance or repair of the flow meter. Landowner, ground water user or authorized operator shall keep each flow meter in good working condition and shall ensure that each flow meter is fully functional, properly maintained and operational.
- 6.2. The landowner, ground water user or authorized operator shall also ensure that their operations or activities do not cause damage to the District's telemetry unit. The landowner, ground water user and authorized operator shall be responsible for any damage to a telemetry unit that is caused by the operations or actions of the landowner, ground water user or authorized operator. The landowner, ground water user or authorized operator should install and maintain fencing, barriers, or other protection that would prevent any person, livestock or equipment from causing damage to a telemetry unit.
- 6.3. In accordance with the District's Flow Meters Policy Statement, landowner, ground water user or the landowner's authorized operator must report any malfunctioning flow meter or telemetry unit to the District office in Scottsbluff, Nebraska within twenty-four (24) hours after discovery. Malfunctioning flow meters or telemetry units discovered on a non-working day shall be reported before the District office closes on the first working day following the discovery. The landowner, ground water user or authorized operator must make a diligent effort to put the flow meter back into service or replace it, if it cannot be repaired, as soon as possible.
- 6.4. During the time in which such flow meter is malfunctioning, or if the flow meter has been removed from the regulated well for service, repair or replacement, the landowner, ground water user or authorized operator must use a method approved by the District to determine the volume of water withdrawn from the regulated well.
- 6.5. The landowner, ground water user or authorized operator must notify the District when a flow meter has been replaced, so that the replaced flow meter can be resealed, and any telemetry unit can be reconfigured by District personnel prior to use of the regulated well.
- 6.6. The District may require the landowner, ground water user or operator to provide

information that will enable District personnel to determine the amount of energy used to operate any regulated well on which a flow meter has been installed. Such information shall be provided upon request, or the landowner, ground water user or authorized operator may authorize District personnel to obtain such information from the entity providing energy to the regulated well. The District may request such information if a flow meter is malfunctioning or if there is reason to believe that the flow meter reading is incorrect. If any power source on a regulated well is equipped with an hour meter, the District may require the landowner, ground water user or authorized operator to provide the appropriate reading from said hour meter.

- 6.7. If the District requires the landowner, ground water user or authorized operator to provide information pursuant to this Chapter, due to a flow meter that has malfunctioned during a water year, a rate of flow test on the regulated well may be performed by District personnel. This measurement will be used in conjunction with any other information collected to determine the amount of ground water use for the certified ground water use for the water year in which the flow meter malfunctioned.
- 6.8. The landowner, ground water user or authorized operator will be contacted by District personnel to schedule an appointment to conduct a rate of flow test. If District personnel are unable to contact the landowner, ground water user or authorized operator personally, via telephone or other readily available means, the District will provide written notification to the landowner by certified mail to the most recent address contained in District records, requiring the landowner to schedule an appointment to conduct the rate of flow test.
- 6.9. Failure to provide any information as requested from District personnel regarding energy used to operate any regulated well on which a flow meter has been installed, or to schedule and conduct the rate of flow test with District personnel, shall result in the suspension of ground water withdrawal from the regulated well until such time as this information is provided and the rate of flow test is conducted.

7 Access and Readings

- 7.1. District personnel, or its designated agents, following notification to the landowner or operator, shall have access to each regulated well, flow meter and telemetry unit, as well as any reasonable area surrounding the regulated well, flow meter and telemetry unit. District personnel, or its designated agents, shall have access in order to read and record flow meter and telemetry unit information, evaluate the performance and accuracy of the flow meter and telemetry unit, determine whether a flow meter or telemetry unit has been tampered with, install, inspect, repair or replace a flow meter or telemetry unit, or any other appropriate purpose.

8 Specific Violations

- 8.1. Any attempt to willfully damage, alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere with or tamper with any flow meter by any person shall be considered a specific violation of this Chapter and are subject to the enforcement

provisions of Chapter 14.

- 8.2. Any attempt to remove, damage or unfasten any seal placed on a flow meter by the District, by any person other than authorized District personnel shall be considered tampering with a flow meter which is a specific violation of this Chapter and is subject to the enforcement provisions of Chapter 14.