

CHAPTER 4 – INSTALLATION AND USE OF FLOW METERS

4.1 Flow Meters Required

4.1.1 Flow meters must be permanently installed on all regulated wells within the overappropriated area of the District, including the Pumpkin Creek Basin Ground Water Management Subarea prior to use of ground water.

4.1.2 Flow meters must be permanently installed on all regulated wells within the fully appropriated area of the District, excluding the area which is also designated as overappropriated, by January 1, 2017.

4.1.2.1 District personnel must install a District seal and take an initial reading of the flow meter following the installation of the flow meter in accordance with Rule 4.1.2 and prior to withdrawal of ground water from the regulated well.

4.1.3 Flow meters must be capable of measuring all the ground water withdrawn from each regulated well, or from all regulated wells connected in a series, for each certified use.

4.1.3.1 If a regulated well is used for more than one certified use, the amount of ground water withdrawn from that regulated well for each certified use must be measured by a separate flow meter.

4.1.3.2 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.

4.2 Flow Meter Installation

4.2.1 A list of flow meter brands that have been approved by the Board for installation and use within the District is available at the NPNRD office at 100547 Airport Road, P.O. Box 280, Scottsbluff, Nebraska, 69361.

4.2.1.1 Only those flow meters included on such list are allowed to be installed and used and will be considered conforming flow meters.

4.2.1.2 Any flow meters that are not on the approved list of flow meters shall be designated as non-conforming flow meters.

4.2.1.2.1 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 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they are no longer able to be repaired and brought into working order to accurately measure the amount of ground water withdrawn from the well.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.

4.3 Flow Meter Specifications

4.3.1 Flow meters shall meet the following requirements to be considered conforming flow meters:

4.3.1.1 Each flow meter shall be installed according to the manufacturer's specifications and calibrated to the pipe size. Calibration must maintain an accuracy of plus or minus two (2) percent of normal flow range.

4.3.1.2 The flow meter registry shall 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.

4.3.1.3 The flow meter registry shall be protected from the elements.

4.3.1.4 Totalizers shall have sufficient capacity to record the quantity of water withdrawn from each regulated well for a period of one (1) year.

4.3.1.5 Totalizers shall be direct reading and the multiplier by which the rate of flow can be determined by timing shall be clearly indicated.

4.3.1.6 The flow meter size, serial number and, if available, the direction of flow shall be clearly stamped on the body of the meter.

4.3.1.7 The inside pipe diameter for which the meter has been calibrated shall be clearly shown on the meter to at least the nearest 0.01 of an inch.

4.3.1.8 Each flow meter shall be installed in a location easily accessible to District personnel.

4.3.1.9 Backflow devices are required where reverse flow occurs through the flow meter.

4.3.1.10 Each flow meter shall have a District seal installed by District personnel.

4.4 Flow Meter Maintenance and Readings

4.4.1 District personnel, or its designated agents, shall have access to each regulated well and flow meter at any reasonable time, following notification to the landowner or operator, to read and record flow meter information, evaluate the performance and accuracy of the flow meter, determine whether such flow meter has been tampered with, or any other appropriate purpose.

4.4.2 Each flow meter shall be kept in good working condition and clear of debris, vegetative growth, or other material that would impede operation, performance or maintenance of the flow meter.

4.4.3 The landowner or the landowner's authorized operator is responsible to ensure that flow meters are fully functional, properly maintained and operational.

4.4.4 The landowner or the landowner's authorized operator shall report any malfunctioning flow meter to the District office in Scottsbluff, Nebraska within twenty-four (24) hours after discovery. Malfunctioning flow meters discovered on any day other than a working day shall be reported before the District office closes on the first working day following the discovery.

4.4.4.1 During the time in which such flow meter is malfunctioning or has been removed from the regulated well for service, repair or replacement, the landowner or the landowner's authorized operator shall use a method approved by the District to determine the volume of water withdrawn from the regulated well.

4.4.4.2 The landowner or the landowner's authorized operator shall make a diligent effort to put the flow meter back into service as soon as possible or to replace it if it cannot be repaired.

4.4.5 The landowner or the landowner's authorized operator shall obtain approval from the District prior to removal of the District seal for any reason.

4.4.6 The landowner or the landowner's authorized operator shall notify the District when a flow meter has been replaced, so that the replaced flow meter can be resealed by District personnel prior to use of the regulated well.

4.4.7 The District may require the landowner 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 and/or 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 and/or operator to provide the appropriate reading from said hour meter.

4.4.7.1 If the District requires the landowner or operator to provide information pursuant to Rule 4.4.7 due to a flow meter that has malfunctioned during a water year, a rate of flow test on the regulated well shall be performed by District personnel. This measurement will be used with the information obtained pursuant to Rule 4.4.7 to determine the amount of ground water use for the certified ground water use for the water year in which the flow meter on the regulated well malfunctioned.

4.4.7.2 The landowner or operator will be contacted by District personnel to schedule an appointment to conduct the rate of flow test. If District personnel are unable to contact the landowner or operator personally, via telephone or other readily available means, the District will provide written notification to the landowner, sent via 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.

4.4.7.3 Failure to provide the information as requested from District personnel, pursuant to Rule 4.4.7, 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 the information pursuant to Rule 4.4.7 is provided and the rate of flow test is conducted.

4.5 Flow Meter Violations

4.5.1 It shall be a violation of these rules and regulations for any person to willfully damage, alter, remove, reset, adjust, manipulate, obstruct, or in any manner interfere with or tamper with any flow meter without the consent of the District General Manager or his/her designee, or to cause, procure, or direct any other person to do so.

4.5.2 Removing, damaging, or unfastening any seal placed on a flow meter by the District, without prior consent from the District General Manager or his/her designee, will be considered to be tampering with a flow meter.

Chapter 4 – Installation and Use of Flow Meters was adopted by Order No. NPNRD-12 on March 8, 2007, effective April 5, 2007; amended by Order No. NPNRD-13 effective, January 11, 2008; amended by

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