

**OFFICE OF THE STATE ENGINEER
STATE OF NEW MEXICO**

IN THE MATTER OF THE REQUIREMENTS)
FOR METERING GROUNDWATER WITH-)
DRAWALS IN THE LOWER RIO GRANDE)
WATER MASTER DISTRICT, NEW MEXICO)

Order No. 172

FIRST AMENDED METERING ORDER

WHEREAS, New Mexico law declares that the water of underground streams, channels, artesian basins, reservoirs or lakes having reasonably ascertainable boundaries, belong to the public and are subject to appropriation for beneficial use, NMSA 1978, § 72-1-1; and

WHEREAS, the State Engineer has a statutory responsibility to supervise the measurement, appropriation, and distribution of the waters of the state, NMSA 1978, § 72-2-1 in accordance with the prior appropriation doctrine, as established by New Mexico law, N.M. Const. art. XVI; NMSA 1978, § 72-1-2; and

WHEREAS, the State Engineer may adopt rules regarding the administration of water and promoting expedited marketing and transfers of water, NMSA 1978, § 72-2-8; NMSA 1978, § 72-2-9.1; and

WHEREAS, the unauthorized use of water to which another is entitled, or the willful waste of surface or groundwater to the detriment of another, or of the public, is a misdemeanor, NMSA 1978, § 72-8-4; and

WHEREAS, the State Legislature has recognized that the need for water administration is urgent, NMSA 1978, § 72-2-9.1; and

WHEREAS, the groundwaters of the Lower Rio Grande Water Master District are in hydrologic connection with the surface water system of the Lower Rio Grande; and

WHEREAS, a requirement for measuring and reporting groundwater uses in the Lower Rio Grande Water Master District will assist the State Engineer in managing and administering the waters of the Lower Rio Grande stream system; and

WHEREAS, measuring and reporting of groundwater diversions in the Lower Rio Grande Water Master District will promote expedited leasing and marketing of water by ensuring a high degree of accuracy in the determination of actual water use, and by assisting in State Engineer analysis of impairment, public welfare and conservation issues; and

WHEREAS, this Order, as set out below, providing for measurement and reporting of groundwater uses in the Lower Rio Grande Water Master District, will assist the State Engineer in performing his statutory duties to protect existing water rights, promote

expedited leasing and marketing of water, conserve water, and promote the public welfare by preventing the over-appropriation, illegal use and waste of water,

NOW THEREFORE, I, John R. D'Antonio Jr., State Engineer of the State of New Mexico, do hereby order metering of all groundwater diversions by totalizing flow meters in the Lower Rio Grande Water Master District, unless specifically excluded below. I further order that all metering devices be in place and operational no later than March 1, 2006. This date has been decided upon to provide adequate notice to groundwater right owners that meters are now required, and to provide sufficient time for their installation so as to avoid hardship. This First Amended Metering Order amends the Metering Order dated December 3, 2004.

DEFINITION OF THE LOWER RIO GRANDE WATER MASTER DISTRICT: The Lower Rio Grande Water Master District includes all lands within the Lower Rio Grande Underground Water Basin, Hot Springs Underground Water Basin and Las Animas Creek Underground Water Basin.

METERING OF ALL GROUNDWATER USES IN THE LOWER RIO GRANDE WATER MASTER DISTRICT: A totalizing flow meter, in accordance with the standards set out in this Order, is required for every groundwater well within the Lower Rio Grande Water Master District, with the exception of wells that serve only the household or domestic uses of a single household, or the irrigation of one acre of noncommercial trees, lawn or garden, or are used for the sole purpose of watering livestock in a grazing operation. Multiple water right owners diverting from a single shared point of diversion may elect to account for their diversions by applying one of the following procedures:

1. Multiple water right owners may install and maintain individual measuring devices for each water right owner's separate diversions from the shared well, so that each metered use may be individually monitored.
2. In the alternative, multiple water right owners may enter into a written well sharing agreement signed by all owners that is acceptable to the State Engineer and filed with the State Engineer, and in which the owners obligate themselves to maintain accurate and timely records of all diversions from the well so that the Water Master can identify easily, and without ambiguity, the owner or owners responsible for any illegal diversion or over diversion from the well. Such well sharing agreement shall provide that, if an illegal diversion or over diversion is identified, and the owner responsible for the illegal diversion or over diversion cannot be easily identified without ambiguity, then all owners subject to the well sharing agreement shall be jointly and severally liable for the illegal diversion or over diversion and its repayment and penalty, if any. Once an illegal diversion or over diversion has been made by owners signatory to a well sharing agreement, the State Engineer will require that all owners subject to that agreement install separate meters for their separate diversions from the well.

Nothing herein shall limit the authority of the State Engineer to require, at a later date, that water uses currently excluded from the requirements of this Order be metered. Nothing herein shall limit the authority of the State Engineer to require specific types of meters as a condition of approval for any permit granted by the State Engineer. After March 1, 2006, no owners of groundwater rights may divert from wells covered by this Order unless such wells are metered in accordance with the specifications described in this Order.

INSTALLATION, MAINTENANCE AND REPAIR: The water right owner shall be responsible for installing, maintaining and repairing the meter. The meter shall be installed in accordance with the manufacturer's specifications. The owner shall keep the meter in good working order so as to provide a continuous and accurate record of the amount of water withdrawn or diverted. If the meter is broken, or not functioning in accordance with the specifications of this Order, diversion of water from that well shall be discontinued unless estimates of diversion can be made by hour meters or electrical meters associated with the well pump. Estimates using data from hour meters shall be made based upon the listed pump capacity. Broken or non-functioning meters must be repaired or replaced within 30 days of the time the meter broke.

REPORTING REQUIREMENTS: Within ten days after meter installation, the water right owner shall submit to the State Engineer a written record of the meter's make, model, date of installation, initial reading, units of measurement and multiplier (if any), information as to the presence of an hour meter or electrical meter associated with the well pump, and the Office of the State Engineer file number for the well. The meter readings, and readings from the hour meter or electrical meter associated with the well pump, shall be reported on or before the tenth day of January, April, July and October of each year, for the three preceding calendar months, unless otherwise ordered by the State Engineer. However, if a permit or license of the State Engineer requires more frequent meter readings, the terms of the permit or license shall control.

All reporting shall be either electronically, through a meter data input system developed by the Office of the State Engineer, or in writing on a form acceptable to the State Engineer. Reports shall include the Office of State Engineer file number for the well, dates of reading, units of measurement and multiplier, if any. If a meter is serviced, repaired or replaced, the owner shall record the meter readings before and after such actions, and shall include those readings in the written report for the quarter in which servicing, repair or replacement occurred.

All over diversions of water made in one accounting year shall be made up during the accounting year following the year in which the over diversions occurred.

STANDARDS, SPECIFICATIONS AND GUIDELINES: Each meter shall be of a type acceptable to the State Engineer and shall be installed, maintained and repaired to be operational in a manner that is acceptable to the State Engineer. The following minimum standards apply to each meter:

- A. The meter shall be a totalizing flow meter with a rated accuracy of plus or minus two (2) percent of actual flow. The installed accuracy of the meter and any

secondary equipment such as data recorders shall be within plus or minus ten (10) percent of actual flow. The meter shall be factory calibrated or calibrated according to industry standards upon installation, and shall be tested for accuracy or re-calibrated at least once every three years thereafter.

- B. The meter shall be installed, inspected, maintained and repaired according to the manufacturer's specifications.
- C. The meter shall contain sufficient recording digits to assure that "roll over" to zero does not occur within a one-year period.
- D. The meter register or display shall record total volume and instantaneous flow rate or be capable of flow rate calculation, be non-resettable, and have a waterproof and tamperproof seal.
- E. There shall be no diversions between the wellhead and the meter.
- F. The meter shall be installed and maintained in such a manner as to prevent meter error, for example, due to the pipe being incompletely filled with water at the location of the meter.
- G. The meter shall be installed and maintained in such a manner as to prevent meter error due to the meter being too close to obstructions in the discharge pipe, such as valves, pumps, bends in the pipe or changes in pipe inner diameter. The meter shall be installed at a distance of at least 10 pipe diameters downstream, and at least five pipe diameters upstream from obstructions to flow, unless manufacturer's installation instructions specify a shorter minimum run of straight pipe.
- H. The meter shall be accessible for reading, inspection and testing by a representative of the State Engineer, including a duly appointed Water Master.
- I. The units of measurement and the multiplier, if any, for determining the total amount of water diverted shall be indicated on the meter.

The Measurement Specifications adopted by the State Engineer and the list of meters that conform to these specifications may be obtained from the District Office and may be found on the State Engineer's website at www.ose.state.nm.us. To install a meter that is not on the State Engineer's list of conforming meters requires that, prior to installation, the State Engineer or the Water Master determine that the meter meets the adopted Measurement Specifications and approve its installation. Any currently installed measuring devices not meeting these specifications must be replaced by March 1, 2006. The State Engineer may modify these standards, specifications and guidelines, or adopt additional standards, specifications and guidelines for meters and for their installation, repair and maintenance, or for other alternative measurement methods or devices, which shall be on file in his office.

SUPERSESSON BY A COURT: In the exercise of his statutory authority to measure the public waters, the State Engineer shall consider this Order and any orders entered by a court of competent jurisdiction regulating the use of groundwater. Where there is any inconsistency between this Order and the orders of a court of competent jurisdiction, the court's order shall control.

VARIANCES: When the strict application of any provision of this Order would be impracticable or would cause unreasonable hardship, the State Engineer may, at his discretion, grant a variance for a specific instance, provided a written request for the variance is filed with the State Engineer and the State Engineer finds the request justifiable. Alternative methods or devices for measuring water uses, and methods of installation, maintenance and repair that do not conform to the minimum Standards, Specifications and Guidelines of this Order, are allowable only upon written authorization from the State Engineer.

MODIFICATION OF THIS ORDER: The State Engineer may, at his sole discretion, supplement or amend this Order to accommodate any specific proposals to implement metering of all groundwater diversions in the Lower Rio Grande Water Master District submitted to him by any entity responsible for compliance with, or assuring compliance with, the provisions of this Order.

EFFECTIVE DATE: This Order shall become effective on the date of signature by the State Engineer. No water shall be diverted from any well in the Lower Rio Grande Water Master District after March 1, 2006 unless the well is equipped with a functional meter as required in this Order.

WITNESS my hand and seal of my office this 20th day of December, 2005.


JOHN R. D'ANTONIO JR., P.E.
State Engineer