



## State of Idaho

# DEPARTMENT OF WATER RESOURCES

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C. L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Interim Director

August 26, 2010

Keith and Terry Jorgensen  
1928 Old highway 30  
Bancroft, ID 83217

RE: Flow Meter Installations Required by Consent Order and Agreement Dated June 24, 2009

Dear Gentlemen,

This year staff from the Idaho Department of Water Resources (Department or IDWR) made additional inspections of the flow meters installed on your wells pursuant to the Consent Order and Agreement (Agreement) that you executed with the Department in 2009. As per the Agreement, IDWR agreed to provide a refund of the fine associated with the Notice of Violation up to \$7,500. This refund is based on stipulations in the Agreement and costs associated with installation of flow meters for the three irrigation wells and one feedlot well.

IDWR has identified some concerns with the meter installations and has delayed issuance of any refund for the following reasons:

1. Flow meters were not installed according to the timeline outlined by the Agreement;
2. Meters were not installed according to manufacturer specifications for the type and style installed, and power supply connections are not adequate;
3. The feedlot meter was not installed until February, 2010;
4. Water was pumped from all the wells past meter installation deadlines;
5. A water right transfer application for the feedlot has not yet been filed with the department.

Item 1: Based on findings by the Department, the irrigation flow meters were installed sometime in late July, 2009 and calibration of these meters took place in early August, 2009. Meters were to be installed on or before the irrigation season, except that IDWR allowed the well in the NWNW, Section 8 T10S, R40E (south or Richins Well) to be installed by June 26, 2009. IDWR recognizes that use at the central and north wells may have been limited during June and July due to crop types and weather patterns but evidence exists that the wells were pumped prior to the flow meters being installed in late July. The Richins well had potatoes under a pivot and most likely pumped most of the month of July leading up to the installation of flow meters.

Item 2: IDWR found that the recommendations outlined by the manufacturer were not met on the installation of two of three irrigation wells. The central well was installed correctly with respect to up and down stream pipe length requirements but not officially hard wired in until after IDWR's visit in September of 2009. IDWR is concerned with the meter location and lack of straight pipe at the north and south wells. Turbulent conditions exist at these locations that will adversely affect accuracy of this type of meter over time. Maintenance over time of these meters is the water user's responsibility. Proper maintenance also includes upkeep of the power supply. IDWR observed loose wiring between the meter and power supply at all three irrigation wells. All wiring connections from the meter to the power panel or supply need to be placed in a conduit to prevent accidental meter failure from cutting, unplugging and/or interruption of power supply. IDWR commonly finds that rodents or other animals

damage exposed wire connections. IDWR is also concerned that the south and north wells are not hard wired to the power supply and instead have plug-in outlet connections where power supply can easily be disconnected at any time. Additionally, the meter at the South well does not display when the well is not in use. The meter should have continuous power supply so that the display can be observed and recorded by the local watermaster when the well is not in use.

Item 3: The meter installation deadline for the feedlot well was July 1, 2009. This flow meter was not installed until February 2010. IDWR does recognize that a different style of meter was installed and caused for a delay in installation. Calibration of this meter was completed in February of 2010.

Item 4: IDWR agreed to allow you to pump the irrigation wells prior to the installation of flow meters at a penalty of \$100.00 per day per well. Base on IDWR's findings the three wells may have been pumped up to 30 days prior to the meters being installed.

Item 5: IDWR notes that a water right transfer application has not yet been filed to increase the amount of water required for the commercial feedlot use. As per the Agreement that you signed, a transfer was to be filed within 60 days of IDWR's execution of the Agreement (by September 1, 2010). Currently the only right associated with the feedlot is a domestic right that does not provide enough water for the current and anticipated level of water use at the feedlot. Earlier this year IDWR representative Corbin Knowles called both you and your attorney to complete the transfer as required by the Agreement.

Although calibration of the flow meters was completed during the field review process, IDWR is concerned that that the north and south well meters will not hold calibration across all flow conditions due to poor pipe profile conditions. The manufacturer installation specifications require 10 diameters of straight pipe upstream of the meter and 5 diameters downstream for insertion style magnetic flow meters. IDWR suggests that at a minimum plumbing should be corrected on the north well to the extent that the plumbing modifications are completed without having to replace thrust blocks below the manifold.

IDWR requests that the flow meters at the Richins and north irrigation wells be hardwired to prevent accidental power loss and to allow the watermaster or IDWR staff to read the meters even when any well is not in use. The wiring must assure that the meter displays can be read at all times unless the utility provider interrupts or terminates the power supply. Additionally, all wire connections must be placed in protective conduit. These meter installation corrections must be implemented within 40 days of the date of this letter. Further, you must file a water right transfer application for the feedlot well within 60 days of the date of this letter. This transfer should include any commercial use for the feedlot out of the central irrigation well. Failure to implement these requested actions in the specified timeline may be cause for IDWR to forego the issuance of any meter refund provided by the Agreement.

The Water District 13T watermaster will be reading the flow meter through the season and reporting readings to the Department. Please contact me or Corbin Knowles at 208-287-4800 if you any questions relating to this matter.

Sincerely



Tim Luke  
Water Distribution Section

Cc: Craig Shuler, Water District 13T Watermaster  
TJ Budge, Attorney for Keith and Terry Jorgensen  
Corbin Knowles, IDWR State Office  
IDWR Eastern Region