

Matt Blunt, Governor • Doyle Childers, Director OF NATURAL RESOURCES www.dnr.mo.gov

June 28, 2005

Mr. Reggie Golden Folsom Ridge, LLC P.O. Box 54 Longmont, CO 80502

APR 0 2 2007

Missouri Public Service Commission

Dear Mr. Golden:

Enclosed is the Report of Inspection for the community water supply serving Big Island Subdivision in Camden County, Missouri. This report is believed to be self-explanatory and I trust you will direct your attention to the recommendations contained therein.

Please feel free to contact Sheila Yoder of this office by calling 573-348-2442 or via mail at Southwest Regional Office, 2040 W. Woodland, Springfield, Missouri 65807-5912, if you have questions.

Sincerely,

SOUTHWEST REGIONAL OFFICE

Cynthia S. Davies, Chief

Water Section

CSD/syg

Enclosure

Public Drinking Water Branch c:

Lake Ozark Water and Sewer Services

CAMDEN/PDW **BIG ISLAND SUBDIVISION** MO3031265 029.pdwp.BigIslandSubdivision.mo3031265.x.2005.06.28.fy05.ins.x.sky

MISSOURI DEPARTMENT OF NATURAL RESOURCES REPORT OF INSPECTION COMMUNITY PUBLIC WATER SYSTEM BIG ISLAND SUBDIVISION CAMDEN COUNTY, MISSOURI PUBLIC WATER SYSTEM ID MO3031265

June 28, 2005

INTRODUCTION

A routine inspection was made of the community public water system serving Big Island Subdivision by Sheila Yoder of the Missouri Department of Natural Resources-Southwest Regional Office on June 2, 2005. The purpose of the inspection was to determine compliance with the Missouri Safe Drinking Water Law and Regulations. The following unsatisfactory features were noted with comments and recommendations for correction. These unsatisfactory features are organized into categories as noted below.

UNSATISFACTORY FEATURES

Category I - Violations of Missouri Safe Drinking Water Regulations

These violations can result in enforcement action if repeated or not corrected. Some violations are more serious than others, and this is explained in the comments.

- 1. The public water system failed to collect routine samples from the distribution system as required by the Safe Drinking Water Regulation 10 CSR 60-4.020(1).
- 2. The public water system dispensed water without obtaining a written permit to dispense water in violation of Safe Drinking Water Regulation 10 CSR 60-3.010.
- 3. The public water system failed to develop a written total coliform bacteria sample siting plan as required by Safe Drinking Water Regulation 10 CSR 60-4.020(1)(A).
- 4. The public water system failed to obtain written authorization from the department prior to construction, alteration, or extension of the water system in violation of Safe Drinking Water Regulation 10 CSR 60-3.010(1).

Category II - Construction Deficiencies from the January 1988 Missouri Department of Natural Resources Design Guide for Community Public Water Supplies Hereinafter Referred to as "Design Guide"

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These deficiencies are important, and the public water system should give serious consideration to correction. However, these deficiencies are not normally subject to enforcement action unless the department determines that these are contributing to the failure of the public water system to provide an adequate volume of safe water to customers at sufficient pressure. If this determination is made, the department may declare that public water system inadequate or of defective design under Safe Drinking Water Regulation 10 CSR 60-4.080(5) and begin enforcement action for correction. If this determination was made during this inspection, the particular unsatisfactory feature is noted with "Violation of 10 CSR 60-4.080(5)."

- 5. The well casing was not protected against physical damage as required by the Design Guide, Part 3.2.7.3.a.7.
- 6. Each service connection is not individually metered as recommended by Design Guide, Part 8.10.

COMMENTS

Public water systems must collect total coliform samples according to a written sample siting plan at sites which are representative of water throughout the distribution system. Distribution sampling point should be chosen where both upstream and downstream repeat samples can be taken. The well can only be used for a repeat sample location, not for monthly routine samples.

All public water systems must obtain a permit to dispense water to the public. There is no permit fee. A new public water system must submit a permit to dispense application and an emergency operating plan, must have obtained a construction permit and constructed the facilities in accordance with this construction permit, and must meet MCL requirements. A grandfathered public water system must submit a permit to dispense application and an emergency operations plan, must submit evidence that the grandfathered well was drilled prior to October 1, 1979, and was used or intended for this system, must have chlorination facilities with 30 minutes effective contact time, must meet MCL requirements, and must submit duplicate certified plans.

The regulations require each system to have a written plan that outlines bacteriological sampling points. This plan should include the following:

- A map or sketch or written description indicating the geographic location (street address) of each routine sampling point and repeat sampling point.
- b) Five routine sampling points for small systems (under 4,901 population) and a separate sampling point for each sample collected on any day for large systems.

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- c) Choose routine sampling points that have upstream and downstream repeat sampling points within five service connections. List these upstream and downstream repeat sampling points.
- d) Choose routine sampling points that are geographically scattered around the distribution system. Do not use the well or plant for routine sampling points.
- e) Choose sample taps in this order of preference:
 - cold water only inside taps
 - freeze-proof taps through the building foundation
 - hot/cold mixing faucets (kitchen sinks)
 - use mixing faucets only if no other taps are available

If you do use mixing faucets, take samples in the following manner: Remove screens, gaskets, and other faucet attachments. If the faucet appears dirty, spray down with a weak bleach solution (100 mg NaOCI/L). Flush the hot water for two minutes and then flush the cold water for three minutes (use a watch to time the two and three minutes). Fill the bottle to the 100 ml line near the top (if the water level is significantly below the line, the sample will be rejected <u>Quantity Not Sufficient</u>, and if it is significantly above the line, the sample will be rejected <u>Bottle Too Full</u>).

Do not use freeze-proof yard hydrants.

All community public water systems must obtain written authorization (a construction permit) from the department prior to construction, alteration, or extension of the water system. To obtain this authorization, two sets of an engineer's report, engineer's plans, and engineer's specifications prepared by and bearing the seal of a professional engineer registered in Missouri must be submitted to the Missouri Department of Natural Resources-Southwest Regional Office, 2040 West Woodland, Springfield, MO 65807, 417-891-4300 along with a construction permit application and a letter from the public water system authorizing the construction (unless the system is applying for the permit), and these documents must be approved by the department. Service lines are exempt from this requirement. A service line must serve only one connection. If a service line could reasonably be expected to serve additional connections in the future (i.e., crosses or is adjacent to property not owned by the business or residence being connected or extends across vacant land suitable for development), a main must be installed and a construction permit obtained. Repairs are generally exempt unless the system is going to be significantly changed. Replacement of mains is exempt unless the main diameter is going to be changed. However, the public water system must take all steps necessary to ensure that the replacement main is installed with proper pipe and connectors, bedding, thrust blocking, and at sufficient depth.

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The well casing and discharge piping must be protected against deterioration, physical damage, and freezing. Paint protects the metal casing from corrosion. An insulated well house prevents freezing.

Individual meters reduce water usage compared to systems with a flat rate, unmetered charge. Customers have an economic incentive to reduce usage and fix leaks. Totaling individual customer meters and comparing with total well pumpage allows the loss due to leakage to be calculated.

RECOMMENDATIONS

Category I - Violations of Missouri Safe Drinking Water Law and Regulations

Note these recommendations are mandatory and failure to follow these recommendations may lead to enforcement action.

- 1. Discontinue using the well as a location for monthly routine samples and begin taking samples in the distribution system.
- 2. Complete and return to this office the enclosed application for a permit to dispense.
- 3. Submit a written coliform sample siting plan to the Southwest Regional Office within 30 calendar days of the date of this report and keep one copy in your permanent water records. A form for this is enclosed.
- 4. The issue of constructing without a permit is being evaluated and reviewed by the Drinking Water Engineering Unit in this office.

Category II - Design Guide Deficiencies

These recommendations are not mandatory unless noted.

- 5. Paint the exterior of the well casing.
- 6. Install meters on each service connection.

SUBMITTED BY:

Sheila Yoder

Environmental Specialist

APPROVED BY:

Charles W. Collins, Chief

Public Drinking Water Unit