



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

February 1, 2018

Mr. Josiah Cox, President
Central States Water Resources
500 Northwest Plaza Drive, Suite 500
Saint Ann, MO 63074

FINDING OF COMPLIANCE

Dear Mr. Cox:

Staff from the Department of Natural Resources conducted an inspection on January 24, 2018, of Hillcrest Utility Operating Company, Inc., located on Highway K, in Cape Girardeau County, Missouri. The entity operates under the authority of Permit to Dispense Water MO4036038.

Compliance with Missouri Safe Drinking Water Statutes Section 640.100.4 was evaluated. The entity was found to be **in compliance** based upon the observations made at the time of the evaluation.

The enclosed report describes the findings and may provide important recommendations, to ensure continued compliance. Your cooperation in implementing those recommendations will be appreciated.

Fact sheets are available on the Department's website to assist entities with understanding and following environmental requirements.

If you have any questions or would like to schedule a time to meet with Department staff to discuss compliance requirements, please contact Mr. Michael Wyatt at (573) 840-9488 or in writing at the Missouri Department of Natural Resources, Southeast Regional Office, 2155 North Westwood Boulevard, Poplar Bluff, Missouri 63901.

Sincerely,

SOUTHEAST REGIONAL OFFICE

Bradley K. Ledbetter
Chief, Public Drinking Water Unit

BKL/mwl

Enclosures: Report of Inspection
Photo Attachment

c: Public Drinking Water Branch (electronically)
Mr. Brian Strickland, P.E. and Mr. Terry Brady, Strickland Engineering, 113 West Main Street, Jackson, MO 63755



Missouri Department of Natural Resources
Southeast Regional Office/Public Drinking Water Program
Report of Inspection
Hillcrest Utility Operating Company, Inc.
Highway K, Cape Girardeau, MO 63702
Cape Girardeau County Missouri
MO4036038
February 1, 2018

Introduction

Pursuant to Section 640.100.4 of the Missouri Safe Drinking Water Statutes, a routine Compliance and Operation Inspection of Hillcrest Utility Operating Company, Inc.'s public drinking water system was conducted by the Southeast Regional Office on January 24, 2018. This inspection was conducted to determine the facility's compliance with the Missouri Safe Drinking Water Statutes and the Missouri Safe Drinking Water Regulations. This report present the findings and observations made during the inspection and covers all (8) critical components of a public water system; System Management and Operation, Operator Certification, Monitoring and Reporting, System Source, System Treatment, Pumping Facilities, Finished Water Storage and Distribution System.

The following people were present at the time of the inspection:

Hillcrest Utility Operating Company, Inc.

Mr. Brian Strickland, P.E., Contract Operator – Present during records review only (573) 243-4080

Mr. Terry Brady, Chief Operator (573) 450-1319

Missouri Department of Natural Resources (Department)

Mr. Michael Wyatt, Environmental Specialist III

Facility Description and History

Hillcrest Utility Operating Company, Inc.'s water system is classified as a community public water system that is in operation throughout the year. This is a primary system which is 100% groundwater and is comprised of one (1) active drinking water well. The supply has an estimated 2,100 gallon hydro-pneumatic pressure tank and a 58,000 gallon ground storage tank in operation. 10.0% sodium hypochlorite bleach is currently being fed for disinfection purposes. The system serves an estimated population of 700 individuals with 238 active service connections available. The supply produces an average of 32,266 gallons per day and a maximum of 51,000 gallons per day. According to information obtained during the inspection, water loss for 2017 was estimated at 2.0%.

Hillcrest Utility Operating Company, Inc.'s water system is classified at a DS-I distribution system certification level. The operator in charge is listed as Mr. Terry Brady, Certification #12381. Mr. Brady has a C level treatment certification and a DS-I level certification for distribution. The backup operator is listed as Mr. Mike Hornbuckle, Certification #10078. Mr. Hornbuckle has a DS-II level certification for distribution.

The well and ground storage tank is located at decimal degrees [37.31096°, -89.62407°].

The last inspection was conducted on June 17, 2015, with numerous items mentioned for correction. Since that time, all items mentioned have been adequately addressed by the supply.

Prior to the inspection, the files and other facility information for Hillcrest Utility Operating Company, Inc. Public Water System (MO4036038) were reviewed. The inspection was conducted during normal business hours. Prior notification of the inspection was provided to ensure timely access to the site.

Discussion of Inspection and Observations

Upon arrival at the facility, I met with Brian Strickland, P.E., and Terry Brady. During this time, I introduced myself and began the inspection by reviewing all relevant system paperwork. Paperwork and records were in acceptable condition during the inspection. The supply's Permit to Dispense Water was issued on January 1, 1975.

The supply is currently in the process of developing a distribution system flushing program. Several new isolation valves have recently been installed. Reportedly, there is one dead end line within the distribution system that is not equipped with a flush hydrant. Approximately 85 new satellite meters have been installed thus far. The supply does not provide fire protection to its residents and reportedly there are no active backflow devices in use within the distribution system. The supply has a large stationary generator available for emergency electricity requirements.

After the records review, I inspected the supply's well; hydro-pneumatic pressure tank, chlorine feed system and 58,000 gallon ground storage tank. The well was drilled in 1973 and is approximately 450 feet deep. The well is cased to a depth of 400 feet and produces approximately 232 GPM. The estimated 2,100 gallon hydro-pneumatic pressure tank was internally sandblasted and epoxy lined in 2016. At that time, a new manway was installed into the tank side also. The 58,000 gallon ground storage tank was constructed in 2015 and has not yet been inspected. The well house building and ground storage tank are surrounded with lockable security fencing.

Sampling and Monitoring

The appropriate sampling materials were taken on the inspection. The manufacturer's standard methods and sampling procedures for each instrument were followed. The instruments for field monitoring that were utilized on the inspection were the Hach Pocket Colorimeter II; Missouri State Health Department approved bacteriological sample bottles and the necessary testing reagents. All instruments were properly calibrated according to manufacturer's recommendations and all reagents were used prior to the stated expiration date. QA/QC data for all field equipment is maintained at the regional office. Two (2) bacteriological water samples were collected during the inspection that tested (**safe**).

The following analytical field data was collected at the time of inspection:

Analytical Field Data			
Parameter	Sample Location	Results	Units
2 Bacteria (Total Coliform)	Route K One Stop	Absent	CFU/100 ml
Chlorine (Free)	Route K One Stop	1.06	mg/L
Chlorine (Total)	Route K One Stop	1.11	mg/L
Chlorine (Free)	Entry Point To Distribution	1.06	mg/L
Chlorine (Total)	Entry Point To Distribution	1.11	mg/L

Compliance Determination and Required Actions

This facility was found to be **in compliance** with the Missouri Safe Drinking Water Regulations based on observations made at the time of the inspection.

Unsatisfactory Findings

No Unsatisfactory Findings were cited as a result of this inspection.

Recommendations

1. The supply does not routinely conduct drawdown measurement testing.

Drawdown measurement tests performed on a monthly basis are recommended and can warn the operator of impending issues such as a screen blockage, low water table and/or excessive pump wear.

The Department recommends that the supply conduct monthly drawdown measurement tests and record the results for review.

2. The supply has only one (1) well available.

Having a single source of drinking water places the supply at risk of water outages.

The Department recommends that the supply consider drilling a second well for backup water requirements when feasible.

Additional Comments

I would like to thank Mr. Brian Strickland, P.E., and Mr. Terry Brady for their cooperation and assistance during the inspection. This supply has shown great improvement and appears to be very well operated and maintained. All personnel involved are to be commended for their efforts. If there are any questions concerning this report please feel free to contact me at 573-840-9488.

Signatures

SUBMITTED BY:



Michael Wyatt
Environmental Specialist III
Southeast Regional Office

REVIEWED BY:



Bradley K. Ledbetter
Chief, Public Drinking Water Unit
Southeast Regional Office

Attachments

Attachment #1 – Photos 1-4

Attachment #2 – Photos 5-8

Attachment #3 – Map



Photo #: 001
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Well house
Description: Well.



Photo #: 002
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Well house
Description: Discharge piping.



Photo #: 003
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Well house
Description: ~2,100 gallon hydro-pneumatic pressure tank.



Photo #: 004
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Well house
Description: High service pumps.



Photo #: 005
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Chlorine feed room
Description: Chlorine feed system.



Photo #: 006
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Back of well house building
Description: Stationary generator.



Photo #: 007
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Tank site
Description: 58,000 gallon ground storage tank.



Photo #: 008
Date Taken: 01/24/2018
By: Michael Wyatt
Program: PDWB
File: Hillcrest Utility Operating Co., Inc. – General
Location: Well/tank site
Description: Fenced well house and storage tank.

