

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Michael L. Parson
Governor

Dru Buntin
Director

August 2, 2022

Big Country Acres Subdivision
Tonya Goforth-Olson
1610 High Sierra Drive
Foristell, MO 63348

FINDING OF COMPLIANCE

Dear Tonya Goforth-Olson:

Staff from the Missouri Department of Natural Resources (Department) conducted an inspection on July 27, 2022 of Big Country Acres Subdivision located at 19 Madre Court in St. Charles County. The entity operates under the authority of Permit to Dispense, MO6030662.

Compliance with the Missouri Safe Drinking Water Law 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.

If you have any questions or would like to schedule a time to meet with Department staff to discuss compliance requirements, please contact Kasia Wasescha by mail at the Missouri Department of Natural Resources, St. Louis Regional Office, 7545 South Lindbergh Blvd., Suite 210, St. Louis, Missouri 63125; by phone at (314) 416-2960; or by email at DNRSLRO.PDW@dnr.mo.gov.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Tracy Haag
Environmental Supervisor

TAH/KMW/jws

Enclosure: Report of Inspection

c: Public Drinking Water Branch, Monitoring Unit
Donald Hopkins, designated operator

**Missouri Department of Natural Resources
St. Louis Regional Office
Report of Inspection
Big Country Acres Subdivision
19 Madre Court, Foristell, St. Charles County
PWS ID# MO6030662
August 2, 2022**

Introduction

I, Kasia Wasescha, of the Missouri Department of Natural Resources' (Department's) St. Louis Regional Office (SLRO), conducted a routine Compliance and Operations Inspection of the Big Country Acres Subdivision public water system. The inspection was conducted on July 27, 2022 with the following participants:

Big Country Acres Subdivision

Jennifer Johnston Standby Operator

(636) 299-2559

anonymousdonh@hotmail.com

Missouri Department of Natural Resources

Kasia Wasescha Environmental Inspector

(314) 416-2960

Kasia.wasescha@dnr.mo.gov

This inspection was conducted to determine whether the system is operated and maintained in compliance with the Missouri Safe Drinking Water Law and the Missouri Safe Drinking Water Commission Regulations, in accordance with 640.120.5, RSMo. This inspection reviewed all eight critical components of a public water system, as defined by the U.S. Environmental Protection Agency (EPA). Required actions to correct deficiencies found during this inspection, as well as any recommendations, are described in this report.

Entity Description and History

Big Country Estates Subdivision is a community public water system requiring an operator with a Distribution I certification. The system is located at 19 Madre Court, Foristell, Missouri 63348. The water system serves approximately 90 customers through 29 active service connections. This is a primary ground water system with one well and one 4,172-gallon hydropneumatic tank.

The system was last inspected on January 16, 2020 and was found to be in compliance. The system has received no violations since the last inspection.

Discussion of Inspection and Observations

As part of the inspection, I reviewed the files for Big Country Acres Subdivision, MO6030662, including previous inspection reports, correspondence, and the status of the Permit to Dispense to familiarize myself with the requirements specific to this system. Prior to the inspection, I contacted Donny Hopkins to set up the drinking water inspection for Big Country Acres Subdivision; after a brief discussion of the scope we set the inspection date for July 27, 2022.

I met Jennifer Johnston at the well house and reviewed the system files before proceeding to view the hydropneumatic tank (see Photo #1) and well #1 (see Photo #2).

As part of the inspection I collected a routine bacteriological drinking water sample from sample point #16. I delivered the sample to the St. Joseph Hospital West courier location to be analyzed by the Missouri State Public Health Lab.

My observations from the inspection of the Big Country Acres Subdivision public water system are organized according to the eight critical components of public drinking water systems: System Management and Operation, Operator Certification, Monitoring and Reporting, System Source, System Treatment, Pumping Facilities, Finished Water Storage, and Distribution System.

System Management and Operation

The system is adequately maintaining and operating the public water system and had the following documents in their possession for review:

- A valid permit to dispense which was issued to the system on October 28, 2008 as required by 10 CSR 60-3.010
- A record retention schedule of applicable records in accordance to 10 CSR 60-9.010, including:
 - - Microbiological and chemical sample analysis reports
 - Previous inspection and sanitary survey reports
 - Actions taken to correct any violations
 - Public notices and consumer confidence reports
 - Variances granted to the system
 - Operational monitoring reports
 - All correspondence with the State
- Operator Contract in accordance to 10 CSR 60-14.010(4)(F)
- Sample siting plan and schedule in accordance to 10 CSR 60-4.022
- An updated Emergency Operations Plan on file in accordance to 10 CSR 60-12.010

Operator Certification

The chief operator is Donny Hopkins; Certification ID# 8788, Distribution System III, Treatment A.

The standby operator is Jennifer Johnston; Certification ID# 15412, Distribution System I, Treatment D.

Monitoring and Reporting

No issues noted in Monitoring and Reporting. The system is taking samples as required.

Table #1 Analyte Monitoring Schedule			
Analyte	Number of Sample(s)	Frequency	Next Scheduled Action
Bacteria	1	Monthly, Wells & Distribution System	Every month, every year
Nitrate/Nitrite	1	Every year per Well	2022
Synthetic Organic Chemicals (SOC)	1	Every six (6) years per Well	2028
Volatile Organic Chemicals (VOC)	1	Every three (3) years per Well	2023
Inorganic Chemicals (IOC)	1	Every three (3) years per Well	2023
Lead & Copper Analysis	5	Every three (3) years from the Distribution System	2022
Radionuclides	1	Every six (6) years per Well	2022
Glyphosate	1	Every nine (9) years per Well	2022

System Source

The system is served by a single groundwater well that appeared to be in good condition (see Photo #2). There was minor corrosion on the well (see Recommendation #3). The electrical conduit sheath had electrical tape on the top and bottom of the piping (see Recommendation #2).

Table #2 Well Specifications						
Well ID	Installation Date	Casing Depth (ft)	Casing Diameter (in)	Total Depth (ft)	Pump Capacity (gpm)	Pump Type
Well #1	1986	507	8	1100	50	Submersible

Table #3 Well Appurtenances											
Well ID	Breather Vent	Pump to Waste	Sample Tap	Access Hatch	Lightning Protection	Casing 18" above ground level	Isolation Valve	Pressure Gauge	Drawdown Gauge	Check Valve	Master Meter
Well #1	Y	N	Y	N/A	Y	Y	Y	N	N	Y	Y

System Treatment

The system does not treat the water.

Pumping Facilities

The system does not utilize booster pumps at this time.

Finished Water Storage

The system is served by a 4,172-gallon hydropneumatic tank (see Photo #1). The tank appeared to be in good condition and was recently repainted. No issues noted.

Distribution System

The system is composed of approximately 8,000 feet of piping according to a hand drawn map of the distribution system. The distribution system is flushed and valves are exercised annually. Jennifer Johnston reported no known cross-connections in the system or any issues with the distribution system.

Due to upcoming Lead and Copper Rule Revisions, all community and non-transient non-community systems should begin their distribution piping inventory (Recommendation #1).

Sampling and Monitoring

As part of this Compliance and Operation Inspection, the following analyses were conducted to verify operational parameters for Big Country Acres Subdivision (Table #4). During the inspection, I collected a routine bacteriological sample to verify that the system is meeting the operational and regulatory parameters required. The sample was collected at sampling site #16 located at 1564 Madre Dr – Lot 8. I took the sample to St. Joseph Hospital West state courier location and it was analyzed at the Missouri State Public Health Lab.

Table #4 Bacteriological Sample Information				
Location	Free Residual mg/L	Total Residual mg/L	Total Coliform	E. Coli
#16 1564 Madre Dr – Lot 8	-	-	Absent	Absent

No analyses yielded results that were outside of statutory or acceptable range.

Compliance Determination, Violations, and Required Actions

Big Country Acres Subdivision was found to be **in compliance** with the Missouri Safe Drinking Water Law and the Missouri Safe Drinking Water Commission Regulations, based upon observations made at the time of the inspection.

Recommendations

1. Community and non-transient non-community systems will be required to submit an inventory of distribution piping to the Department in 2024 in accordance to the Lead and Copper Rule Revisions. It is recommended that systems begin to inventory all piping, both public and private, in the distribution.

Systems should also make financial plans to replace all lead, galvanized requiring replacement, and unknown service lines. The American Rescue Plan (ARPA) and the Bipartisan Infrastructure Act have funding available for the Lead Service Line Inventories and Lead Service Line Replacement Plans.

2. The electrical conduit on the well has been repaired with electrical tape. Electrical tape should only be considered a temporary repair measure, as it could tear or degrade and expose an opening for contamination to get into the well. The system should install a more permanent repair to the electrical conduit in order to protect the well.
3. Minor corrosion was present on the well. The system should repaint the well. Corrosion can put excess wear on system components and thus lead to costly repairs, or an exposed opening for contamination to enter.

Additional Comments/Conclusion

On March 1, 2019 amendments to the Missouri Safe Drinking Water Regulation were implemented which directly affect 10 CSR 60 Chapters 3, 4, 6-9, 11, 13, and 14. Personnel should review these regulation amendments and implement all applicable changes as they apply to the public water system. The amendments can be reviewed here:
<https://www.sos.mo.gov/adrules/csr/current/10csr/10csr>.

The United States Environmental Protection Agency (EPA) reported that the State of Missouri is among the top 25% of states affected by federal flooding declarations. This was noted during a March 31, 2015 webinar on EPA's new *Flood Resilience: A Basic Guide for Water and Wastewater Utilities*, which was hosted by the Association of State Drinking Water Administrators and the EPA. The Flood Resilience Guide is geared towards helping small to medium sized water and wastewater utilities prepare for, and recover from, a flood event. This interactive guide is available online at: <https://www.epa.gov/waterutilityresponse/build-flood-resilience-your-water-utility>. For more information on emergency planning, visit <http://water.epa.gov/infrastructure/watersecurity/emerplan/>.

All major water users are required by law to register water use annually. The Department of Natural Resources does not regulate the use of water – only the amount of water a major water user has the potential to use. Missouri shares water resources with many other states, some of which regulate water use and have already established their demand for water. It is important for Missouri to document our need for water and to protect our right to that water. Registering major water use establishes a user's need for water and helps the Department understand the water needs of Missouri citizens. Registration is required by all persons, firms, and corporations with the capacity to withdraw or divert 100,000 gallons or more per day or 70 gallons per minute from any combination of stream, river, lake, well, spring, or other water source. As stated in the

Revised Statutes of Missouri (RSMo), the purpose of sections 71.287 and 256.400 to 256.430 is to ensure the development of information required for the analysis of certain future water resource management needs such as the Missouri State Water Plan. Information about the plan may be found at: <http://dnr.mo.gov/mowaterplan/>. To register online or for mail-in forms go to: <https://dnr.mo.gov/geology/wrc/mwu-forms.htm>. For further information or questions, contact the Water Resources Center at (573) 368-2100.

Missouri Public Drinking Water Regulation 10 CSR 60-3.010 requires all public water systems to submit a construction application with engineered plans and specifications to the Department for review and approval prior to any new construction, modification, alteration, or extension of your water system source, treatment, storage, or distribution piping. This requirement includes modifications made to your treatment process that would significantly change or alter plant capacity or treatment processes. Adding, removing, or changing chemical additives and/or their injection locations may significantly alter your treatment process. Water systems must notify the Department at least 60 days in advance of making any changes to the treatment process. Please make sure your water system has written approval prior to beginning any construction or modifications. Permits and construction specifications can be found at: <https://dnr.mo.gov/env/wpp/pdwb/permits.htm>. For further information or questions, contact the Permits and Engineering Section at (573) 751-5331.

Missouri Public Drinking Water Regulation 10 CSR 60-7.010(2) requires that public water systems notify the Department within 48 hours of a failure to comply with any regulation or monitoring requirement. Since Regulation 10 CSR 60-4.080(9) requires all public water systems to maintain a minimum pressure of 20 psi, all public water systems must notify the Department when pressures in their system fall below 20 psi.

If you have any questions or would like to schedule a time to meet with Department staff to discuss compliance requirements, please contact Kasia Wasescha by mail at the Missouri Department of Natural Resources, St. Louis Regional Office, 7545 South Lindbergh Blvd., Suite 210, St. Louis, Missouri 63125; by phone at (314) 416-2960; or by email at DNRSIRO.PDW@dnr.mo.gov. For assistance with compliance issues or general technical assistance, you may also contact George Shoultz, SLRO Water Specialist. Water Specialists' duties are primarily intended to provide technical assistance and operator training to systems such as yours. We encourage you to utilize their services.

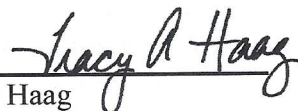
Signatures

SUBMITTED BY:



Kasia Wasescha
Environmental Inspector
St. Louis Regional Office

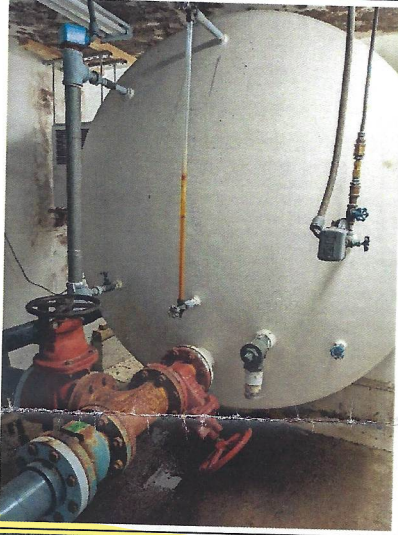
REVIEWED BY:



Tracy Haag
Environmental Supervisor
St. Louis Regional Office

Attachments:

- Attachment #1 – Photographs #1 - #2
- Attachment #2 – System Map



Photograph: # 1.
Taken By: Kasia Wasescha
Date Taken: July 27, 2022
Program: PDW

Entity: Big Country Acres Subdivision
Permit: MO6030662
Location: inside well house
Description: hydropneumatic storage tank



Photograph: # 2.
Taken By: Kasia Wasescha
Date Taken: July 27, 2022
Program: PDW

Entity: Big Country Acres Subdivision
Permit: MO6030662
Location: outside of well house
Description: Well #1. The top and bottom of the electrical conduit is covered in green electrical tape. Minor corrosion present on well head.



Figure 1: Overhead view of the system. Image taken from Google Maps