EXHIBIT F

WUNDERLICH SURVEYING & ENGINEERING, INC.
20 S. CHURCH STREET • P.O. BOX 536 • UNION, MO 63084
(636) 583-8400 Fax: (636) 583-1810

TMF Checklist Response Letter

For
Proposed Public Well and Distribution System

To Serve

"Holtgrewe Farms"

Review No. 62854-09
PWS ID # MO 6031607

Date
February 22, 2010

Owner
Holtgrewe Farms, LLC
109 North Oak St.
Union, MO 63084

Prepared By

Wunderlich Surveying & Engineering, Inc
20 South Church Street
Union, Missouri 63084

Table of Contents

INTRODUCTION:

This report is in response to the DNR review number 62854-09, dated 12-11-09 and in conjunction with the application package for a community well and distribution system to serve Holtgrewe Farms Subdivision. The plans, specs, and application were submitted to DNR on 12-3-09. Items on the attached checklist that were included in the application package are marked as "provided". Items involving further explanation or discussion will be marked with a number corresponding to the notes below.

Item #1. The "Owners Acknowledgement" and the "Checklist for Construction Authorization and Permit to Dispense Water to the Public" forms are completed and attached to this report.

Item #2. The items for the financial capacity demonstration are shown on the attached financial capacity worksheets.

Item #3. Two copies of the Managerial Plan and Emergency Operation Plan have been included in this report.

Item #4. Because the continuing operating authority will be regulated under the PSC, the Public Water Supply District #1 is reluctant to provide a letter waiving their authority. This was discussed over the phone with Steve Wyatt from DNR on 12-23-09 in which he told us to proceed without the letter from the district.

Notes for "Required Items for Technical Capacity Demonstration:

T1. An updated distribution map will be maintained at all times.

T2. Holtgrewe Farms is located within the PWSD #1 of Franklin County. However, PWSD #1 does not have sufficient service in this area, and when contacted, were not willing to extend services to the subdivision. As stated above, the district will not issue a letter. Because this system will be regulated under the PSC, Steve Wyatt said to proceed without the letter.

T3. Two other alternatives were considered for supplying water to Holtgrewe Farms. The first option was to tie in to the existing PWSD #1 system. However, the district only had a 2 inch line available, and it was 3300' feet away. This option was not feasible due to the additional cost. The second option was to tie in to the City of Washington's existing system. However, the nearest line was over 3000' away and all of the necessary easements through private property could not be acquired. This option was not feasible either.

T4. Upon completion of the system, the engineer will verify that the construction was completed in accordance with the approved Plans & Specifications.

Notes for "Required Items for Managerial Capacity Demonstration:

M1. The continuing authority for this system is currently being established as Hotlgrewe Farms Water Company Inc. An application is being completed and will be filed with the Public Service Commission.

M2. The written rate structure is attached to this report.

M3. Public meeting policy concerning rates and fees is attached to this report.

M4. The company's organizational chart is attached and will be publicly displayed.

M5. The customer complaint policy is attached and will be publicly displayed.

M6. The customer complaint policy is attached and will be publicly displayed.

M7. The compliance person is identified on an attachment to this report.

M8. The operational management plan is attached to this report.

M9. The emergency operation plan is attached to this report.

M10. Once the system is operational, appropriate monitoring will take place.

Notes for "Required Items for Financial Capacity Demonstration:

F1. Standard Accounting Principles and Practices will be used.

F2. The system for water fee collection is explained in an attachment to this report.

F3. The PDWP financial assessment tool was utilized and attached.

F4. The written rate structure and service fees are attached to this report.

F5. The PDWP financial assessment tool was utilized and attached.

F6. The PDWP financial assessment tool was utilized and attached.

F7. The PDWP financial assessment tool was utilized and attached.

F8. The PDWP financial assessment tool was utilized and attached.

F9. The PDWP financial assessment tool was utilized and attached.

RECEIVED DEC 2 3 2009

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Mark N. Templeton, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

AI
Holtgrewe Farms, L.L.C.
Review No. 62854-09
PWS ID # MO 6031607

December 11, 2009

CERTIFIED MAIL # 7007 3020 0002 9078 5349
RETURN RECEIPT REQUESTED

Mr. Tony Bequette, Member
Holtgrewe Farms Subdivision
109 North Oak Street
Union, Missouri 63084

Dear Mr. Bequette:

We are advising that additional information is needed to complete the proposal which included plans, specifications and an engineering report for a TMF-new community water system for Holtgrewe Farms Subdivision, Franklin County, Missouri, submitted by Wunderlich Surveying and Engineering, consulting engineers, Union, Missouri, on December 7, 2009. In order for us to review the proposed waterworks, please advise your engineer to complete his submittal by sending to us the following:

1. Please complete the enclosed "Owners Acknowledgement" and the "Checklist for Construction Authorization and Permit to Dispense Water to the Public" forms.

2. The required items for financial capacity demonstration in the TMF checklist have not been submitted.

3. Two copies of your Managerial Plan and Emergency Operation Plan need to be submitted.

4. A letter from Franklin County Public Water Supply District # 1, waiving their continuing operating authority in regards to Holtgrewe Farms Subdivision.

If it is not possible for you to respond with the requested information within 30 calendar days, an extension of time for response may be requested by letter. The request for extension must identify the reasons why the applicant cannot respond within the established time frame and must include a proposed timetable or deadline for response. Extension will only be granted when the request is received within 30 calendar days from your receipt of this letter.

Further action on your application for a construction permit awaits your satisfactory response to the above comments. Should you have any questions, please feel free to call Bev Elya at (573) 751-5924 or Elaine Kimbrough at (573) 526-4661.

A copy of the regulations regarding submission of plans and approval of water works is enclosed. **Please note that regulations provide that our approval of the project must be secured in writing before construction work is started.** Our approval is your assurance that the proposed work complies with requirements of this Division.

You will receive copies of our report and approval of the documents for the proposed work, and that report will serve as your authorization to award contracts and begin construction.

Please be advised this facility may be required to obtain other permits from the department. It is your responsibility to insure that any and all necessary permits for this facility have been obtained.

Please be aware of the regulations that affect new public water systems commencing operation after October 1, 1999. All new community and non-transient non-community public water systems **commencing operation after October 1, 1999** must show, as part of their application for a "Construction Authorization and Permit to Dispense Water to the Public" that the proposed water system has the technical, managerial, and financial (TMF) capability to operate in compliance with drinking water regulations, and that a permanent organization exists which will serve as the continuing operating authority of the management, operation, replacement, maintenance and modernization of the facility. If your proposed facility is within the legal boundaries of an existing higher preference continuing operating authority, you must provide documentation that water service is not available from the existing higher preference continuing operating authority, or a statement from each existing higher preference continuing operating authority waiving its preferential status. Enclosed is a copy of the final rules 10 CSR 60-3.020 and 10 CSR 60-3.030 for your reference.

When construction of your public water system is complete and you are ready to place it into operation, you must notify this office. At that time, you will need to provide a copy of your engineer's certification that all of your public water system facilities have been constructed in accordance with approved plans and specifications. You will also need to provide the necessary documentation to demonstrate that all TMF Capacity requirements have been met.

Note that all of the requirements for TMF Capacity, as listed on the enclosed Checklist, will be assessed prior to our issuance of a Permit to Dispense Water to the Public for this facility. If you have any questions regarding the TMF Capacity, please feel free to contact Steve Wyatt at 573/751-1599.

Sincerely,

WATER PROTECTION PROGRAM

Steven C. Wyatt, P.E., Acting Chief
Public Drinking Water Permits and Engineering Section

SCW:erk

Enclosures

c: Jim Vandike, DGLS
Ken Tomlin, PDWB
Loetta Ireland, PDWB
Sheri Fry, DGLS
Steve Wyatt, PDWB
PSC
Wunderlich Surveying and Engineering
St. Louis Regional Office

OWNER'S ACKNOWLEDGEMENTOF REQUIREMENTS TO OBTAIN A PERMIT TO DISPENSE WATER

The following items are requirements, in accordance with 10 CSR 60-3.010, 10 CSR 60-3.020 and 10 CSR 60-3.030, that must be met prior to issuance of a Permit to Dispense Water to the Public (Operating Permit):

REQUIRED ITEMS FOR TECHNICAL CAPACITY DEMONSTRATION

- Notify the DNR Regional Office upon completion of construction;
- The Professional Engineer shall provide certification to the Regional Office that construction was in accordance with the approved Plans & Specifications;
- Designation of properly certified operator(s) having all equipment needed including safety equipment to perform job duties;
- An updated distribution map shall be maintained and available to the department upon request;
- If the proposed system is within the legal boundaries of an existing higher preference Continuing Operating Authority (10 CSR 60-3.020(A)), either obtain a statement from the existing COA waiving its preferential status, or show the existing system is not feasibly available as defined in 10 CSR 60-3.020(6)(B).

REQUIRED ITEMS FOR MANAGERIAL CAPACITY DEMONSTRATION

- A Continuing Operating Authority exists in accordance with 10 CSRE 60-3.020.
- Written Rate Structure and Service Fees shall be publicly displayed;
- A public meeting shall be held for changes in rate structure or service fees with advanced notice to customers, and records of customers notice and summary of public meetings will be kept for 5 years;
- An updated Organizational Chart with the name, position, business address and phone number of all positions that provide drinking water functions, including elected officials, shall be publicly displayed and made available to the department;
- A customer complaint designated person with the name, title, business address, business telephone number, and office hours shall be publicly displayed;
- Written Customer Complaint Procedures for receiving, investigating, resolving, and recording customer complaints shall be publicly displayed;
- Designation of the compliance person to be contact for regulatory issues and compliance actions;
- An Operational Management Plan which describes operating procedures for reliable water system operation, consistent with type of treatment and degree of automatic control, including the process to be used to identify and implement changes to current procedures and ensure that changes in responsible personnel are reported and implemented;
- A completed Emergency Operation Plan in accordance with 10 CSR 60-12.010;
- Present evidence of the ability to produce water meeting applicable MCLs*;

*A Permit to Dispense Water may be issued temporarily until the information is provided.

REQUIRED ITEMS FOR FINANCIAL CAPACITY DEMONSTRATION

- Present evidence of a system for water fee collection including measures to obtain payment for non-payment (i.e., disconnect service, late fee charge, etc.);
- An annual budget of revenues vs. expenditures and an annual comparison of planned budget to actual budget must be available during inspections. Note: all revenue shall cover drinking water costs;
- A five year budget and capital improvement plan must be developed and updated annually, including at a minimum, annual revenue income, annual estimated cost of operation including salary of operator, Operating Reserve, Emergency Equipment Replacement Reserve, Debt Service Reserve, and proposed methods to finance both capital charges and operating expenses;
- An Operating Reserve = 1/10 of annual operations and maintenance expenses shall be established over a ten year period in at least equal payments. EX: O&M expenses $8,000, Operating Reserve = $800 by year 10, not including inflation, therefore $80 + inflation per year is minimum reserve;
- An Emergency Equipment Replacement Reserve equal to or greater than the most expensive mechanical equipment item shall be established in at least equal annual payments over ten (10) years (i.e., if most expensive equipment is $10,000, the minimum yearly reserve must be $1,000/year + inflation);
- A Debt Service Reserve shall be equal to or exceed that required in bonding agreement;

I have read and understand the above requirements and acknowledge the specified information must be provided prior to obtaining a Permit to Dispense Water to the Public (Operating Permit).

Owner/Official Custodian Signature: _____ Date: 12-21-09

PUBLIC WATER SYSTEM NAME: Holtgrewe Farms Water Supply

PWS ID #: MO 6031607 (if not known, may be completed by the PDWP)

Please sign and return this form to the:

Missouri Department of Natural Resources
Public Drinking Water Program
P.O. Box 176
Jefferson City, MO 65102

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
PUBLIC DRINKING WATER BRANCH

SYSTEM NAME: Holtgrewe Farms Subdivision		
Provided √		**CHECKLIST FOR CONSTRUCTION AUTHORIZATION AND PERMIT TO DISPENSE WATER TO THE PUBLIC** – applicable to new water systems commencing operation after October 1, 1999
√		Engineering Report – 2 copies with Professional Engineer's seal, certified in the state of Missouri;
√		Detailed Plans and Specifications – 2 copies with Professional Engineer's seal on all copies;
√		Application for Construction Authorization – one application completed and signed by Owner/President/Official Custodian.
Provided √	**NA**	***REQUIRED ITEMS FOR TECHNICAL CAPACITY DEMONSTRATION***
√		Discussion of properly certified operator(s), including acknowledgment of the adequate number of operators having all equipment needed including safety equipment to perform job duties (Note: Designation of the properly certified operator(s) is required prior to issuance of Permit to Dispense.);
Note T1		Acknowledgement of the requirement for the system to maintain an updated distribution map;
√		Acknowledgement there was planning and consideration for the technical capacity impacts of future regulations. The upcoming regulations known as of October 1999 are:
	√	Interim Enhanced Surface Water Treatment Rule (IESWTR),
	√	LT-1 Enhanced Surface Water Treatment Rule,
√		Ground Water Rule,
√		Disinfectants/Disinfection By-Products Rule,
√		Radon Rule, and
	√	Filter Backwash Rule;
		DESIGN GUIDE STANDARDS
√		A description of the proposed new system's service area, a description of service area(s) of nearby system(s);
Note T2		Acknowledgement that a higher preference public water system (defined 10CSR60-3.020(6)(A)) does not exist, is not available as defined in 10 CSR 60-3.030(6)(B), or has provided a statement from the existing system waiving it's preferential status.
√		Extent of the water works system including nature and extent of area to be served, maps of legal boundaries, provisions for extending the water works system to additional areas, and appraisal of future service requirements;
Note T3		An assessment of alternatives including feasibility and practicability, financial considerations including estimated cost of integral parts of the system and comparisons of operator requirements for operation of each alternative;
√		A description of the proposed source(s) quality, capacity, protection, and production.
√		A description of the treatment process proposal, waste disposal, and automation;
√		A description of the project site, including various considerations, potential pollution sources, location with respect to other establishments, houses, etc.;
√		Water Use Data, including population trends and projections, present water consumption, water losses, projected demands, fire flow demand, present and future source yields, etc.
√		Consideration of future extensions for needs;
√		Flow requirements, including hydraulic analyses based on flow demands and pressures and fire flows;
Note T4		A statement that the Engineer will provide certification to the department that construction was completed in accordance with the approved Plans & Specifications.

SYSTEM NAME: Holtgrewe Farms Subdivision		
Provided √		***REQUIRED ITEMS FOR MANAGERIAL CAPACITY DEMONSTRATION***
Note M1		Confirmation that a permanent organization exists as the continuing operating authority for the management, operation, maintenance, replacement, and modernization of the facility. Designation of the Continuing Operating Authority is required.
		(If a developer has a plan for a home owner's association, there should be acknowledgement of the following: • the incorporated association owns the facility and has authority to lay all necessary water lines, • an adopted covenant covering the land of each owner, which assures connection to the system if available, • the bylaws of the association provide for the proper operation, maintenance, and modernization of the facility to include at minimum: the power to regulate the use of the facility, the power to levy assessments on members and enforce them on each owner, and the power to convey the facility to a higher COA, as listed in 10 CSR 60-3.020(6)(A).);
Note M2		Acknowledgment the Written Rate Structure and Service Fees will be publicly displayed when in operation;
Note M3		Acknowledgement that a public meeting will be held for changes in rate structure or service fees with advanced notice to customers;
√		Acknowledgement there was planning and consideration for the managerial capacity impacts of future regulations. The upcoming regulations are the same as listed under the Technical Capacity Section;
Note M4		Organizational chart with the name, position, business address and phone number of all positions that provide drinking water functions, including elected officials;
Note M5		Customer complaint designated person, acknowledging that the name, title, business address, business telephone number, and office hours will be publicly displayed;
Note M6		Written Customer Complaint Procedures for receiving, investigating, resolving, and recording customer complaints with the acknowledgement that the Procedure will be publicly displayed;
Note M7		Designated compliance person to be contact for regulatory issues and compliance actions;
Note M8		An Operational Management Plan which describes operating procedures for reliable water system operation, consistent with type of treatment and degree of automatic control, including the process to be used to identify and implement changes to current procedures and ensure that changes in responsible personnel are reported and implemented;
Note M9		Complete an Emergency Operation Plan in accordance with 10 CSR 60-12.010. A model emergency operation plan can be found at http://www.dnr.mo.gov/env/wpp/eop/index.html;
Note M10		Present evidence of the ability to produce water meeting applicable MCLs. This involves one year of appropriate monitoring. Until this monitoring is completed, an interim or temporary permit to dispense may be issued.

SYSTEM NAME: Holtgrewe Farms Subdivision		
Provided √		***REQUIRED ITEMS FOR FINANCIAL CAPACITY DEMONSTRATION***
Note F1		A statement that Standard Accounting Principles and Practices were used in accordance with either the Generally Accepted Accounting Principals & Practices or the NARUC Uniform Systems of Accounts;
Note F2		A system for water fee collection including measures to obtain payment for non-payment (i.e., disconnect service, late fee charge, etc.). This is usually in the bylaws/covenants but should also be with a separate written rate structure and service fees;
Note F3		Acknowledgement of an annual budget of revenues and expenditures with an annual comparison of planned budget to actual budget**;
Note F4		Written rate structure and service fees;
Note F5		Annual revenues cover public water system costs;
Note F6		A five year budget and capital improvement plan to be updated annually, including at a minimum, annual revenue income, annual estimated cost of operation including salary of operator, Operating Reserve, Emergency Equipment Replacement Reserve, Debt Service Reserve, and proposed methods to finance both capital charges and operating expenses**. The following is a list of typical revenues and expenses for possible consideration in the budget and capital improvement plan: ***Revenues***: Water Rates; Fees and Service Charges; Hookup Charges; Other Revenues as Drinking Water Revenues; etc., ***Other Funds/Resources Available:*** Depreciation Reserves; Capital Contribution from Owner/Stockholder (own source); Contribution/Advance from Customer/Others; Grants; DWSRF Loan; Business loans; Withdrawal from Capital or Other Reserves **Operating & Maintenance Expenses** includes Operating Expenses and General & Administrative Expenses: **Operating Expenses**: Salaries and Benefits; Power and Other Utility; Chemicals and Treatment; Monitoring; Materials, Supplies, and Parts; Transportation; etc. **General & Administrative Expenses:** Salaries and Benefits; Office Supplies and Postage; Insurance-vehicles, liability, workers compensation; Legal and Accounting; Contractor/ Professional Services; Fees; Other Deductions, Income Taxes, Other Taxes, etc., ***Reserve Expenses:*** Operating Reserve; Emergency Equipment Replacement Reserve; and Debt Service Reserve, ***Capital Improvement Plan Expenses:*** New Capital Facilities; Renewal and Replacement Facilities; Safe Drinking Water Act Facilities; Non-facility Costs; Other Use of Funds; etc., ***Debt Obligation Expenses*** [principal and interest expenses]: Repayment to Customers/others; Repayment of Business Loans; Repayment of SRF Loan; Other Use of Funds; etc., and ***Funded Depreciation Expenses*** in excess of all other p&i payments;
Note F7		Discussion of establishing an Operating Reserve (must = 1/10 of annual operations and maintenance expenses and established over a ten year period in at least equal payments). EX: O&M expenses $8,000, Operating Reserve = $800 by year 10, not including inflation, therefore $80 + inflation per year is minimum reserve;
Note F8		Acknowledgement of an Emergency Equipment Replacement Reserve equal to or greater than the most expensive mechanical equipment item and established in at least equal annual payments over ten (10) years (i.e., if most expensive equipment is $10,000, the minimum yearly reserve must be $1,000/year + inflation);
Note F9		Specify and acknowledge the Debt Service Reserve will equal or exceed the required in bonding agreement;
√		Acknowledgement there was planning and consideration for the financial capacity impacts of future regulations. The upcoming regulations are the same as listed under the Technical Capacity Section.

** **The PDWP has a financial assessment tool which may be utilized upon request to analyze system financial needs based on a five (5) year budget and capital plan. It is optional and may be used simply as a tool for information in preparing a budget and capital improvements plan.**

HOLTGREWE FARMS WATER COMPANY LLC.

February 23, 2010

WATER RATE STRUCTURE

This letter is to inform you that as of January 1, 2010, each water costumer that connects to the Holtgrewe Farms water system will be subject to the following fees for the water provided by the Holtgrewe Farms Water Company, LLC. to the customer. Water meters will be read monthly and the customer will be billed according to use at the following rates.

Water Connection Fee per Meter: $1,600.00 The water meter and appurtenances will be supplied by the company.

Monthly Minimum Rate: $28.00 (for first 3,000 gallons used)

Commodity Rate: $1.61 per 500 gallons above the Minimum Monthly Rate.

Deposit: $75.00

Reconnect Fee: $50.00

Holtgrewe Farms Water Company, LLC. will review and adjust billing rates on a yearly basis. Rate changes will occur in January of each year if required. Holtgrewe Farms Water Company, LLC. reserves the right to grant leak adjustments at its own discretion. Leak Adjustments will be addressed at the regular meetings of the Holtgrewe Farms Water Company, LLC. Meeting dates and times will be published prior to the meeting.

DISCONNECT POLICY

All accounts over 30 days late are subject to disconnection. Disconnection will be posted on door of residence at least 3 days prior to disconnection. All reconnection will be subject to a fee.

ORGANIZATIONAL CHART

President	Tony Bequette
Vice President	Anthony Allmeroth
Treasurer	Elizabeth Ann Bequette
Secretary	Tony Bequette

109 North Oak St
Union, MO 63084
636-583-4311

Customer complaint should be addressed to Tony Bequette, 109 North Oak St., Union, MO 63084. All unresolved complaints should be submitted in writing describing the problem. Problems will be investigated within seven days.

Compliance person – Anthony Bequette 636-583-4311

Holtgrewe Farms Water Company LLC.
PWS ID No. MO 6031607
Review No. 62854-09

Operational and Management Plan

System Design

This system has been designed for hands free operation. Only monitoring of the system is required.

Standard Operating Procedures

The following data and procedures are for a fully operational system serving the entire 47 houses with no chemical treatment in place. Should treatment be required in the future, this plan will need to be updated to reflect those changes. Until the development is complete, the average daily numbers for the pumps and tanks shall be updated to reflect the actual number of houses drawing on the system at the given time.

Some items in this plan are unknown at this time and therefore left blank. These items will need to be updated when the information is available.

The operator shall be familiar with all current Mo~DNR regulations, and sampling and submitting requirements.

Process to Change Procedures

Any requests to change or add to the following procedures shall be addressed at the regular meetings of Holtgrewe Farms Water Company LLC. Any additional requests or requirements from the governing authority must be incorporated into this plan.

Emergency Operations

Refer to the Holtgrewe Farms Water Company LLC. "Emergency Operation Plan" in case of emergency.

Contact Information				
	Name	***Primary Phone Number***	***Emergency Phone Number***	***Email***
Owner	Holtgrewe Farms Water Company LLC.	636-583-4311		
Owners Rep or Manager	Tony Bequette	636-583-4311		
Operator in Charge	Bob Wideman	636-583-8880		
Assistant Operator				
Health Dept Contact	Franklin County Health Department	636-583-7300		
Water Testing Lab	Franklin County Lab	636-583-8880		terra@widemanwelldrilling.com
Equipment Vendor				
Equipment Vendor				
Pump Supplier				
Plumber				
Excavator				
Electrician				
Power Company	Ameren UE	1-800-552-7583		
Water Hauler	Wideman Well Drilling	636-583-8880		
Engineer	Wunderlich Surveying & Engineering Inc.	636-583-8400		info@wseteam.com
Local Municipality	City of Washington Public Works	636-390-1076		
Local Water District	PWSD#1	636-561-3738		
DNR Regional Office		314-416-2960		
Spill Reporting	DNR Emergency Spill Line	573-634-2436		
USEPA		1-800-821-5073		

Sources – Groundwater

Source Name and Location	*Well type, spring, or other source*	*Well depth (ft)*	*Safe yield (gpm)*	*Pump rate (gpm)*	*Pump set depth (ft)*	*Pump Make, Model & HP*	*Source use (primary, auxiliary, emerg.)*
Well head located in well house		600	90+	37	300	4" Pentair Water, Signature2000 5HP	primary

System Pumps

Pump Name, Location	*Pump Make, Model & HP*	*Pump Rate (gpm)*	*Comments (pump control method, etc.)*
Booster pump within well house	Berkeley, BVM32-2, 7.5HP	87 gpm @ 70 psi	Booster pumps will be controlled by a square D pressure switch set for the 50/70 psi range

General System Information

PWS Name	*Holtgrewe Farms Water Company LLC.*		**PWSID# MO6031607**
SOPs Updated by		*Date Updated*	
Street address of system	Holtgrewe Farms Subdivision	*Number of service connections*	47
Town		*Number of people served*	165
Zip code	63090	*Source type (GW, SW, GWUDI)*	GW
County	Franklin	*Total source capacity (gpm)*	90+
Comments			

System Notes

Storage

Storage Tank Name, Location	*Pressure or Atmospheric*	*Storage (gal)*	*Comments (operating levels, cleaning methods, frequency, etc.)*
Vertical storage tank outside of well house	Atmospheric	12,600	
Horizontal pressure tank inside of the well house	Pressure	1,078	Must operate at the 50/70 psi range

Operating Pressures

	Low	*High*	*Comments*
System pressure settings (psi)	50	70	

Distribution System

Type of Pipe	SDR 21 class 200 PVC pipe	
Distribution main size(s)	4 inch	
Service connection shut-off locations	Must maintain a drawing in the well house that clearly shows all of the valve locations. Valves must be labeled 1 through 10 on the drawing	
Number of main valves	10	
Valve Name or #	*Location*	*Shuts off what area*
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Sample Sites

Description	Location	Chlorine	Total Coliform	Disinfection Byproducts	Lead & Copper	Other
Raw Water	Sample valve inside of well house	■		■		
Entry Point	Gate valve on bottom of pressure tank					
Distribution	Flush hydrant #1 (eastern most hydrant)					
	Flush hydrant #2 (western most hydrant)					

Daily System Checks:

Task	Notes
Record water plant meter readings & calculate total daily production	Average day demand is 16,450 gals per day (gpd). If demands are higher than this for more than three days, there may be a leak.
Record pump run times and start cycles	Well pump normally runs 8 hours per day. Booster pump normally runs 3 hours per day.
Conduct a general security check	Inspect windows, doors, hatches, screens, well caps, fences, gates, lighting, locks, and alarms. Check if locked or set, look for tampering or vandalism.
Check and record water levels in storage tanks	The storage tank normally operates between 14- 12 feet of water.

Tasks Calendar Year:_____

Schedule of Tasks for the Year: Use frequency shown or as deemed necessary by the continuing authority													
° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*													
Task	**Frequency**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Read master meter and record in a log book	Weekly												
Inspect wellheads, controls, seals, vent and screen.	Weekly												
Inspect tank overflow, vent screens, and hatches	Weekly												
Read water meter at each house. Compare to the total usage on the master meter for indication of leak	Monthly												
Submit previous month's operation report to governing authority by the 10th. Include total water usage, total billable water used, and any obvious problems	Monthly												
Collect Bacteriological Sample(s) per the attached Mo~ DNR sampling guidelines and procedures	Monthly												
Lubricate pumps, motors, blowers, and all moving/rotating equipment	Quarterly												
Inspect all pump house water lines, gaskets and fittings for corrosion and leaks	Quarterly												
Flush distribution system and exercise all valves	1-2 times per year												
Review/update Operational & Maintenance Plan	Biannual												

Tasks Calendar Year:_____

Schedule of Tasks for the Year: Use frequency shown or as deemed necessary by the continuing authority													
° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*													
Task	**Frequency**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Update emergency plan and emergency contact information, provide updated info to governing authority	Biannual												
Prepare and distribute System Performance Summary(SPS) to Consumers	Annual												
Submit SPS to governing authority, include certification that SPS was delivered to consumers	Annual												
Inspect storage tanks for defects, leaks, and sanitary deficiencies - clean and repair as needed	Annual												
Confirm all backflow prevention devices are tested by a certified tester	Annual												
Clean, inspect, and repair all safety equipment	Annual												
Perform building preventative maintenance	Annual												

Missouri Department of
Natural Resources
Division of Environmental Quality

SAMPLE COLLECTION TECHNIQUES FOR COLIFORM ANALYSIS

Sample Containers

Sample bottles from Public Health Laboratories contain a chlorine neutralizer in liquid or crystalline form. They are sterile and ready for used when shipped. **Do not rinse contents from the container and keep bottle closed until it is to be filled.**

Sample Collection Procedures

1. Assemble all of the sampling supplies before you begin and wash your hands thoroughly before handling supplies.

2. Go to the sampling location(s) specified in the sampling plan. The sample should be taken from a clean smooth-nosed cold water tap if possible. Avoid drinking fountains, leaky faucets and frost-proof yard hydrants, since it is not practical to sterilize these fixtures.

3. If possible, remove any aerators, strainers, or hoses, because they may harbor bacteria.

4. Open the cold water tap (or hot water if a mixing faucet is used) for about three minutes before collecting the sample. This should adequately clear the water line.

5. Flame-sterilize the tap or chemically disinfect the tap. Do not flame-sterilize if the tap is plastic or if aerators are attached. Disinfect the tap by thoroughly rinsing both the inside and outside of the tap with a mixture of 50 percent bleach and 50 percent tap water. Take extreme care with strong bleach (oxidizing) solutions.

6. Flush the tap for an additional three minutes with cold water and reduce to a gentle flow to about the width of a pencil. Do not change the water flow once you have started sampling. It could dislodge microbial growth.

7. Grasp the cap along top edge and remove carefully. Do not touch the inside with your fingers. Hold the bottle in one hand and the cap in the other. Do not lay the cap down or put it in a pocket! Also, take care not to contaminate the sterile bottle or cap with your fingers or permit the faucet to touch the inside of the bottle.

8. Fill bottle to the 100 ml line or to a little above the black line. Hold the bottle so water entering the bottle will not come in contact with your hands. Samples will not be tested if there is less than one-half inch air space in the bottle. Then place the cap on the bottle and screw it down tightly.

9. Fill out the water analyses card in waterproof ink.

Shipping instructions

If you use the Missouri Department of Health and Senior Services - Contract Courier to deliver your samples, the following tip may help. The contract courier cannot pick samples up before 10:30 a.m. Therefore, to be certain of meeting the holding times of 30 hours, it is important to collect your samples that morning and have them dropped off at the contract courier pickup point by 10:30 a.m. Contact the Department of Natural Resources' Public Drinking Water Branch for more information at 573-526-6929. If you use the U.S. Postal Service, remember the 30-hour time limit starts when the sample was collected. The department recommends you use Priority Mail or faster to mail water samples.

A. Sometimes, in spite of taking all precautions, you may get a call from us or results by mail telling you that you have Total Coliform or E.coli bacteria in your water. You will then be given specific instructions that may include collecting repeat samples to confirm that the first routine sample was not a sampling error.

B. Whenever you have a sample test positive for coliform bacteria, you are required to collect five routine samples the following month. A maximum contaminant level, or MCL, violation is issued to a facility when two or more monthly bacteriological samples have coliform or E.coli bacteria present. Please call your local Department of Natural Resources Regional Office to discuss the procedure.

Sample results are available within four or five days on Drinking Water Watch

Military time versus 12 hour

24-hour clock	12-hour clock
00:00	12 a.m. 12 midnight (start of day)
01:00	1 a.m.
02:00	2 a.m.
03:00	3 a.m.
04:00	4 a.m.
05:00	5 a.m.
06:00	6 a.m.
07:00	7 a.m.
08:00	8 a.m.
09:00	9 a.m.
10:00	10 a.m.
11:00	11 a.m.
12:00	12 p.m. 12 noon
13:00	1 p.m.
14:00	2 p.m.
15:00	3 p.m.
16:00	4 p.m.
17:00	5 p.m.
18:00	6 p.m.
19:00	7 p.m.
20:00	8 p.m.
21:00	9 p.m.

22:00	10 p.m.
23:00	11 p.m.
24:00	12 a.m. 12 midnight (end of day)

Missouri Department of Natural Resources

P.O. Box 176, Jefferson City, MO 65102
800-361-4827 / 573-751-1300
E-mail: drinkingwater@dnr.mo.gov
Revised on Friday January 15 2010

December 30, 2009

Emergency Operation Plan

1.) The designated coordinator to be called under emergency conditions shall be the president of Holtgrewe Farms Water Company Inc.
2.) In the event of an emergency, the designated coordinator shall be authorized to expend funds to meet the existing emergency.
3.) A list of telephone numbers for the coordinator and key personnel are listed as follows:
    a. Coordinator: Tony Bequette: Phone 636-583-4311
    b. Certified Operator: Bob Wideman: Phone 636-583-8880
    c. Holtgrewe Farms Water Company Inc. Maintenance: Tony Bequette: Phone 636-583-4311
    d. DNR Regional Office: Phone 314-416-2960
    e. Franklin County Health Department: Phone 636-583-7300
    f. DNR Emergency Spill Line Phone 573-634-2436 Fax 573-526-5101
    g. USEPA: 1-800-821-5073 Phone 913-281-0991 Fax 913-551-7949
    h. PWSD #1: Phone 636-561-3738
    i. City of Washington Public Works Phone 636-390-1076
    j. Tank truck: Wideman Well Drilling Inc: Phone 636-583-8880
    k. Electric: Ameren UE Phone 1-800-552-7583
    l. Wunderlich Surveying & Engineering Inc: Phone 636-583-8400
    m. Wideman Well Drilling Inc: Phone 636-583-8880

    This list shall be updated quarterly or immediately after a position change has occurred

4.) In the event the water system becomes incapacitated, tank trucks can be utilized to provide water to the system. The closest municipal water system would be PWSD #1. The City of Washington could also provide water.
5.) The connection of the tank truck could be made through the pump to waste line. This connection will require a booster pump to provide service to the hydro-pneumatic tank. In the event the hydro-pneumatic tank fails, a pressure tank will need to be obtained as soon as possible. Until a pressure tank is obtained the system will be out of service.
6.) The connection to pipe the booster pump shall be provided. Access to the booster pump within 24 hours should be provided. 24 hour access to the control equipment should also be provided.
7.) Written emergency procedures were obtained from the department of natural resources for tank truck disinfection and emergency chlorination of the system. These procedures are attached to this document.

GUIDELINES FOR PREPARING TANK TRUCKS FOR TRANSPORTING POTABLE WATER

The following procedures are guidelines for using tank trucks or trailers to provide potable water during drought or other emergency conditions. The appropriate Department of Natural Resources= regional office should be contacted before a water hauling operation is begun.

Selection

Tank trucks or trailers to be used for transporting potable water should be selected with two considerations in mind: the nature of the truck=s normal use and the degree of difficulty in cleaning. Commercial milk or potable water tank trucks are preferred. Trucks designed for the transport of wine, vegetable oil, beer, or other food products may also be used. Trucks that have been used to haul petroleum products or other toxic substances are not acceptable.

Cleaning Procedures

Water trucks: Flush tanks thoroughly with potable water and inspect for particulate matter such as rust and sediment.

Milk trucks: Scrub tanks with detergent, flush thoroughly with potable water, and inspect for cleanliness.

The following cleaning procedures may be employed for tank trucks normally used for hauling such liquids as apple juice, vinegar, wine, yeast, liquid sugar, beer, corn syrup, cottonseed oil, peanut oil, margarine oil, linseed oil, safflower oil, and soybean oil:

1. Open the drain and flush with hot, potable water.

2. Steam with an emulsifying detergent until the tank is clean. If steam is not available, circulate the detergent at a temperature of 180 degrees to 210 degrees Fahrenheit, changing the location of the nozzle to keep the interior continuously wet from top to bottom. Repeat this procedure until the tank is clean.

3. Rinse the tank thoroughly with hot, potable water and drain.

All hoses should be stored off the ground and should be properly capped in storage and transit to prevent contamination. All equipment should be of an approved type for water supply purposes and should be new or obtained from a water supply application. All hoses, pumps and other equipment should be flushed and disinfected before use.

Disinfection Procedures

Disinfection can be accomplished by filling the clean tank with potable water containing at least 50 ppm chlorine and allowing the water to stand for a minimum of 24 hours. The table below indicates the amount of hypochlorite solution (Purex, Clorox, or other household bleach) required to produce 50 ppm in various quantities of water. To insure proper mixing, the bleach must be added slowly as the tank is being filled.

Capacity of Tank, Gallons	Gallons of Bleach Required for 50 ppm*
500	2
1000	1
1500	1 2
2000	2
2500	2 2
3000	3
3500	3 2
4000	4
4500	4 2
5000	5

*Assumes household bleach with five (5) percent available chlorine.

If circumstances preclude the 24-hour waiting period, special instructions for disinfecting the tank with higher chlorine concentrations for shorter periods of time can be obtained from the Department of Natural Resources.

Filling Procedure

The source of water must be an approved public water supply. Tanks should be filled and emptied through an air gap to prevent backflow and contamination of the source. Tank inlets or openings should be covered and properly sealed.

Water to be transported via tank truck must carry a free chlorine residual of one (1) ppm at the beginning of each haul. This may be achieved by adding one (1) cup of household bleach to each 1000 gallons of water. The bleach should be added during filling to insure uniform distribution.

Testing

Chlorine residual should be measured frequently to insure that a minimum of 0.2 ppm free chlorine residual is maintained. If time allows, tank water should be analyzed for bacterial contamination prior to use.

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Mark N. Templeton, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

AR/R1
Holtgrewe Farms, L.L.C.
Review No. 62854-09
PWS ID# MO 6031607

January 26, 2010

CERTIFIED MAIL # 7008 2810 0000 2019 8842
RETURN RECEIPT REQUESTED

Mr. Tony Bequette, Member
Holtgrewe Farms, L.L.C.
109 North Oak Street
Union, Missouri 63084

Dear Mr. Bequette:

We are advising that detailed plans and specifications for Holtgrewe Farms L.L.C., Franklin County, Missouri were submitted by Wunderlich Surveying and Engineering, Inc, consulting engineers, Union, Missouri, on December 7, 2009. Please make reference to Review No. 62854-09 when submitting documents pertinent to this proposal. In order for us to complete our review of the project, please consult with your engineer and respond to the following comments within 30 calendar days from your receipt of this letter:

1. We recommend resizing the water mains from four inches to six inches in order to accommodate the possibility of future fire flow. Fire hydrants can only be installed on water main six inches or larger per Design Guide for Community Water Systems (effective August 29, 2003) section 8.1.2 a.

2. The surface casing should either be grouted between the outside of the casing and the drill hole or it needs to be removed once drilling is completed, per the "Design Guide for Community Water Systems" (effective August 29, 2003) section 3.2.5.5, section 3.2.5.6 and section 3.2.5.11.

3. The steel casing for the well should have either full circumferential welds or threaded coupling joints per Design Guide for Community Water Systems" (effective August 29, 2003) section 3.2.5.6 e. The specifications provided call for solvent-cement joints section 02525-4, Part 3.2.D.4.

4. The casing vent of the well should be at a minimum 1.5 inches in diameter and have an 18 mesh corrosion resistant screen per Design Guide for Community Water Systems (effective August 29, 2003) section 3.2.6.5.

5. Verify that the permanent casing will project at least twelve inches above the well house floor or eighteen inches above the final ground surface per Design Guide for Community Water Systems" (effective August 29, 2003) section 3.2.5.12 a.

6. Provide plans showing the diameters of the drill hole from the twelve inch casing to the bottom of the well. This should document the size of the drill hole for the twelve inch casing, the six inch casing, and after the six inch casing ends to the bottom of the well.

7. Provide detailed specifications showing the procedures to be followed for grouting the well.

8. Provide the height of the overflow from the finished floor of the tank and provide the type of pipe the overflow will be.

9. Provide the head range in the storage tank.

10. Provide the type of pipe of the inlet and the outlet of the storage tank.

11. A chain link security fence must be provided around the perimeter of the storage tank area and well house to provide protection against vandalism, sabotage, terrorist acts, or access by unauthorized personnel.

12. Provide documentation of the continuing operating authority including who the owner of the water facility will be once the subdivision is populated, and who owns (or will own) the land where the well, storage tank, and well house is located. Bylaws should also be provided for the party responsible for the ongoing maintenance, operation, and modernization of the system. There should also be a covenant for the owner of each piece of property assuring them connection to the system if it is available. Also that the incorporated association has authority to lay all necessary water lines for the subdivision.

13. The operational management plan submitted with the project is not sufficient. The plan should outline all operating procedures consistent with maintaining and operating the water facility. This needs to include the type of treatment and degree of automatic control, including the process to be used to identify and implement changes to current procedures and ensure that changes in responsible personnel are reported and implemented. References to other documents and guides are not sufficient.

If it is not possible for you to respond, you may request an extension by letter to Mr. Maher Jaafari, P.E., Chief, Public Drinking Water Permits and Engineering Section, P.O. Box 176, Jefferson City, MO 65102. The request for extension must identify the reasons why the applicant cannot respond within the established time frame and must include a proposed timetable or deadline for response. Extension will only be granted when the request is received within 30 calendar days from your receipt of this letter.

Further action on your submittal awaits your satisfactory response to the above comments. Two copies of the revised plans and specifications should be submitted to this office for further review. If you have any questions, or if we could be of assistance to you, feel free to call us.

Sincerely,

WATER PROTECTION PROGRAM

Kristin Bailey

Kristin Bailey, Environmental Engineer
Public Drinking Water Permits and Engineering Section

KJB:erk

c: Wunderlich Surveying and Engineering
St. Louis Regional Office

WUNDERLICH SURVEYING & ENGINEERING, INC.
20 S. CHURCH STREET • P.O. BOX 536 • UNION, MO 63084
(636) 583-8400 Fax: (636) 583-1810

February 22, 2010

Holtgrewe Farms, L.L.C.
Review No. 62854-09
PWS ID# MO 6031607

Response to DNR Review Letter Dated January 26, 2010

MO DNR Public Drinking Water
P.O. Box 176
Jefferson City, MO 65102

The following comments correspond to the number of each item on the review letter dated January 26, 2010.

1. A dry hydrant will be installed in the subdivision lake to meet the fire flow requirements. The proposed 4 inch water line is for potable water only and will not see any fire flow demand.

2. The surface casing will be temporary and will be removed once drilling is complete. The drawings have been revised.

3. Section 02525-4, Part 3.2.D.4 of the specifications has been revised to reflect either full circumferential welds or threaded coupling joints.

4. The report and drawings have been revised to reflect a 1.5 inch diameter casing vent and #18 mesh corrosion resistant screen.

5. The drawings have been revised to show the permanent casing projecting 12 inches above the well house floor.

6. The drawings have been revised to show the casing diameter and corresponding drill hole diameter for each casing transition.

7. Detailed specifications showing the procedures to be followed for grouting the well have been added to the report and specifications.

8. A dimension was added to the plans showing the height of the overflow from the floor of the tank and the type of pipe is now shown on the pipe description.

9. As shown on the drawings, the floor elevation of the proposed storage tank is 600.5', the high water, pump off elevation is 614.5', the pump on water elevation is 612.5', and the

max hour, low water elevation is 610.26'. The normal head range of the storage tank for average daily demand is 14' deep to 12' deep.

10. As noted on sheet 4 of 8, the inlet pipe to the storage tank will be 2 inch ductile iron (DI), and the outlet pipe from the storage tank will be 3 inch ductile iron.

11. A chain link security fence has been added to the plans.

12. Holtgrewe Farms Water Company LLC will be the continuing authority for this facility. The Articles of Organization as well as the Certificate of Organization are attached to this report. Holtgrewe Farms Water Company LLC will own the water facility and the land where the well, storage tank, and well house is located. A revised Operational and Management Plan is attached to this report and explains the procedures for ongoing maintenance, operation, and modernization of the system. The water system will only serve the Holtgrewe Farms subdivision and will have service available at each lot. A legal description of the service area will be filed with the application to the Public Service Commission to ensure future lot owners that service is available. Upon completion of the final plat for the subdivision, easements along all water lines will be dedicated to the continuing authority for the purpose of installation, maintenance, and repair of the water system.

13. The operational and management plan has been revised and attached to the updated "TMF Checklist Response Letter".

Nothing Follows

Wunderlich Surveying & Engineering Inc.

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
Jeremiah W. (Jay) Nixon, Governor • Mark N. Templeton, Director
www.dnr.mo.gov

CI
Franklin Co.
Holtgrewe Farms, L.L.C.
Review No. 62854-09
PWS ID # MO 6031607

March 10, 2010

Mr. Tony Bequette, Member
Holtgrewe Farms Subdivision
109 North Oak Street
Union, Missouri 63084

Dear Mr. Bequette:

Enclosed is the Approval on an Engineering Report, Plans and Specifications for a TMF-new water system for Holtgrewe Farms, L.L.C., Franklin County, Missouri, which I believe is self-explanatory.

Please be aware of the regulations that affect new public water systems commencing operation after October 1, 1999. All new community and non-transient non-community public water systems **commencing operation after October 1, 1999** must show, as part of their application for a "Construction Authorization and Permit to Dispense Water to the Public" that the proposed water system has the technical, managerial, and financial (TMF) capability to operate in compliance with drinking water regulations, and that a permanent organization exists which will serve as the continuing operating authority of the management, operation, replacement, maintenance and modernization of the facility. If your proposed facility is within the legal boundaries of an existing higher preference continuing operating authority, you must provide documentation that water service is not available from the existing higher preference continuing operating authority, or a statement from each existing higher preference continuing operating authority waiving its preferential status. Enclosed is a copy of the final rules 10 CSR 60-3.020 and 10 CSR 60-3.030 for your reference.

When construction of your public water system is complete and you are ready to place it into operation, you must notify this office. At that time, you will need to provide a copy of your engineer's certification that all of your public water system facilities have been constructed in accordance with approved plans and specifications. You will also need to provide the necessary documentation to demonstrate that all TMF Capacity requirements have been met.

Note that all of the requirements for TMF Capacity, as listed on the enclosed Checklist, will be assessed prior to our issuance of a Permit to Dispense Water to the Public, for this facility. If you have any questions regarding the TMF Capacity, please feel free to contact Kristin Bailey at 573/522-5495.

Should you have any questions, please feel free to call Kristin Bailey at573/522-5495.

Sincerely,

WATER PROTECTION PROGRAM

Maher Jaafari, P.E.
Chief, Permits and Engineering Section
Public Drinking Water Branch

MJ:kbe

Enclosures

c: Wunderlich Surveying and Engineering
St. Louis Regional Office
Stephen Jones, PDWB
Loetta Ireland, PDWB
Jim Vandike, DGLS
Sheri Fry, DGLS
PSC

DEPARTMENT OF NATURAL RESOURCES OF MISSOURI

APPROVAL ON AN ENGINEERING REPORT, PLANS AND SPECIFICATIONS FOR A NEW COMMUNITY WATER SYSTEM

Holtgrewe Farms Water and Sewer Inc.
Franklin County, Missouri

March 10, 2010

Review Number 62854-09

INTRODUCTION

An engineering report, plans and specifications for a new community water system to serve Holtgrewe Farms Water and Sewer Inc., Franklin County, Missouri were submitted for review and approval by Wunderlich Surveying and Engineering, Inc, consulting engineers, Union, Missouri.

BRIEF DESCRIPTION

In general the engineering report recommends constructing a new community water system to serve Holtgrewe Farms Water and Sewer Inc. The water system is to include a new well, a 12,792 ground storage tank, water mains, two booster pumps and a pressure tank to serve a 47 lot subdivision. The report was examined as to sanitary features which may affect the operation of the project, including size, capacities of units and factors which may affect efficiency and ease of operations. Approval of the engineering report as regards to these points is hereby given. This approval is valid for two years.

The plans and specifications provide for a new well, a ground storage tank, a hydropneumatic storage tank, and waterline extensions.

The proposed well will have a total depth of approximately 600 feet and have a surface elevation of 600 feet above mean sea level. The well is to have a sixteen inch drill hole with a 12 inch surface casing that will extend approximately twenty feet. The surface casing will be removed once drilling is complete. A ten inch drill hole will extend from the bottom of the surface casing to an estimated depth of 350 feet, then narrowing to six inches and extending an additional 250 feet for a total depth of 600 feet. A six inch diameter steel casing will be centered throughout the casing hole to an estimated depth of 350 feet and will extend at least 12 inches above the well house floor. The annular space between the casing and the drill hole will be grouted with 2 inches of cement grout. A water sealed surface plate will be installed to support the pump and discharge piping. A casing vent, check valve, depth gauge and other appurtenances are to be provided. The deep well will be designed and constructed in accordance with AWWA Standard A100. The well and the well house is to be located at the Southeast ¼, Southeast ¼, Section 20, Township 44 North, Range 1 West, Franklin County, Missouri. The well house is to be 24 feet by 16 feet. The well house will house the well, discharge piping, and hydropneumatic storage tank. The pump is to be a submersible type, vertical turbine well pump with a pumping capacity of 30 gpm and is to be manufactured by Pentair Pump Group or approved equal. Two 7.5 HP booster pumps When completed, the deep well and appurtenances that will be in contact with potable water will be cleaned, tested and disinfected in accordance with AWWA standards prior to being placed in service.

The welded steel 12,792 gallon ground storage tank is to be approximately fifteen feet tall and have an inner diameter of twelve feet. The finished floor foundation will have an elevation of 600.50 feet above mean sea level. The ductile iron overflow pipe shall be 4 inches in diameter at an elevation of 614.52 feet above mean sea level. The two inch ductile iron inlet pipe will extend approximately eight feet above the bottom of the tank. The three inch ductile iron outlet pipe will extend one foot above the finished floor of the tank. The tank will be located in Southeast ¼, Southeast ¼, Section 20, Township 44 North, Range 1 West, Franklin County, Missouri. The tank will be designed and constructed in accordance with AWWA Standard D100. The tank will be provided with an air vent, roof ladder, hatches, manways, necessary piping and other appurtenances as shown on the drawings and specified in the detailed specifications. The surfaces of the tank will be sandblasted and painted. The interior of the tank will be painted with NSF approved coatings that are listed in the latest addition of ANSI/NSF Standard 61. Before being placed in service, the tank will be cleaned, disinfected, and sampled for bacteriological analysis. A chain link security fence will be provided around the perimeter of the storage tank area and well house to provide protection against vandalism, sabotage, terrorist acts, or access by unauthorized personnel.

A hydropneumatic storage tank as manufactured by Quick Tanks, Inc. model QHTC1000 or approved equal, is also to be provided. The hydropneumatic tank will have a gross capacity of 1,078 gallons and a usable volume of approximately 192 gallons at the 40/60 psi range. The tank will be approximately 4 feet in diameter and 12.5 feet in length.

The proposed waterlines will consist of approximately 3,840 lineal feet of four inch Class 200 SDR 21 PVC pipe, all necessary valves, fittings, blow-off hydrants and appurtenances will be provided as per detailed plans and specifications. Before being placed in service, the waterlines will be pressure tested, flushed, disinfected and sampled for bacteriological analysis.

Kristin Bailey

Kristin Bailey, Environmental Engineer
Public Drinking Water Permits and Engineering Section

APPROVAL TO CONSTRUCT
The engineering plans and specifications described above were examined as to sanitary features of design which may affect the operation of the sanitary works, including size, capacities of the units, and factors which may affect the efficiency and ease of operation. Approval as regards these points is hereby given.

Approval is given with the understanding that final inspection and approval of the completed work shall be made by the Department of Natural Resources before same is accepted and placed in operation. If construction is not commenced two (2) years after the date of issue or there is a halt in construction of more than two years, the approval to construct will be void unless an extension of time has been granted by the department.

In the examination of plans and specifications, the Department of Natural Resources, Public Drinking Water Program does not examine the structural features of design or efficiency of mechanical equipment. This approval does not include approval of these features.

The Department of Natural Resources, Public Drinking Water Program reserves the right to withdraw the approval of plans and specifications at any time it is found that additional treatment or alterations are necessary to assure reasonable operating efficiency and to afford adequate protection to public health.

Rules of
Department of Natural Resources
Division 60—Public Drinking Water Program
Chapter 3—Permits

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 3—Permits

10 CSR 60-3.010 Construction Authorization, Final Approval of Construction, Owner-Supervised Program and Permit to Dispense Water

PURPOSE: This rule sets out criteria for acquisition and revocation of a permit to dispense water to the public, including submission of predesign studies and plans and specifications, system operation and reliability of the system.

PUBLISHER'S NOTE: The publication of the full text of the material that the adopting agency has incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, the full text of that material will be made available to any interested person at both the Office of the Secretary of State and the office of the adopting agency, pursuant to section 536.031.4, RSMo. Such material will be provided at the cost established by state law.

(1) Community Water System Requirements.

(A) Written Construction Authorization. A supplier of water which operates a community water system must obtain written authorization from the department prior to construction, alteration or extension of any community water system, unless the project will be constructed under the provisions of 10 CSR 60-10.010(2)(C)2., and, for community water systems commencing operation after October 1, 1999, must comply with the requirements of 10 CSR 60-3.020 and 10 CSR 60-3.030.

1. Two (2) copies of predesign studies pertaining to the project must be submitted to the department before plans and specifications for new water systems or for significant changes to existing water systems are reviewed for approval.

2. Construction authorization shall be requested by submitting written application and two (2) copies of the plans and specifications, as outlined in 10 CSR 60-10.010(2), for the proposed project to the department for review and approval.

3. Preparation of engineering reports, plans and specifications for community water systems and inspection of construction for the purpose of assuring compliance with drawings and specifications must be done by an engineer as defined by 10 CSR 60-2.015 (2)(E)2.

4. A construction authorization shall be valid for a period of two (2) years from the date of authorization. If construction is not commenced within two (2) years from the date of authorization, a new construction authorization must be obtained from the department.

(B) Final Construction Approval. Final construction approval must be obtained from the department for all projects for which approval is required before that project is placed into service. A supplier of water which operates a community water system need not obtain construction approval for projects constructed under the provisions of 10 CSR 60-10.010(2)(C)2.

(C) Supervised Construction Program. A supplier of water which operates a community water system may establish a supervised construction program as specified in 10 CSR 60-10.010(2)(C)2.

(D) Permit to Dispense. Except as exempted in subsection (3)(A) of this rule, no water may be dispensed or be made available to the public by any person without first applying for in writing and receiving a permit to dispense water. The department shall issue permits to dispense water to community water systems under the following terms and conditions:

1. A supplier of water establishing a new community water system must, in order to obtain a permit to dispense water—

A. Comply with the requirements of 10 CSR 60-10.010;

B. Present evidence of the ability to produce water meeting applicable maximum contaminant levels;

C. Present evidence of reliable water system operation, consistent with the type of treatment and the degree of automatic control provided;

D. Complete an emergency operating plan as described in 10 CSR 60-12.010; and

E. For community water systems commencing operation after October 1, 1999, provide proof of continuing operating authority as set forth under 10 CSR 60-3.020 and meet the technical, managerial and financial capacity requirements of 10 CSR 60-3.030; and

2. A supplier of water which operates an existing community water supply not holding a valid permit to dispense water is operating in violation of the Missouri drinking water statutes and regulations and must apply to the department in writing for a permit. Water suppliers in this category must—

A. Present evidence to the department of the ability to produce water meeting applicable maximum contaminant levels;

B. Present evidence of reliable water system operation, consistent with the type of treatment and the degree of automatic control provided;

C. Submit, in duplicate, certified plans and specifications describing the water source, any treatment facilities and the distribution system to the department. Certification must be either by the engineer preparing the information or if prepared by the owner, be a properly notarized affidavit;

D. Provide disinfection with an effective contact time for wells used as a source of supply which were constructed prior to October 1, 1979, and which do not meet community water system construction criteria or where construction cannot be verified by the owner; and

E. Complete an emergency operating plan as described in 10 CSR 60-12.010.

(2) Noncommunity Water System Requirements.

(A) Permit to Dispense. Except as exempted in subsection (3)(A) of this rule, a supplier of water which operates a noncommunity water system must apply in writing to the department for a permit to dispense water to the public. Noncommunity public water systems must present evidence to the department of—

1. The ability to produce water meeting applicable maximum contaminant levels;

2. Reliable water system operation, consistent with the type of treatment and the degree of automatic control provided; and

3. For nontransient noncommunity water systems commencing operation after October 1, 1999, continuing operating authority meeting the requirements of 10 CSR 60-3.020 and technical, managerial and financial capacity meeting the requirements of 10 CSR 60-3.030.

(B) Construction Authorization. Each noncommunity supplier of water must notify the department, in advance, of the intent to construct a new or expand an existing water system.

1. Noncommunity water systems utilizing surface or ground water under the direct influence of surface water and nontransient noncommunity water systems must obtain written authorization from the department prior to construction, alteration or extension of the system and must comply with 10 CSR 60-3.020 and 10 CSR 60-3.030.

2. Transient noncommunity water systems utilizing groundwater—

A. May be required, at the discretion of the department, to submit plans and specifications for approval;

B. Shall be constructed in accordance with the department's "Standards for Non-Community Public Water Supplies, 1982"; and

C. Must file with the department, within sixty (60) days of completion, a record of construction for all new or modified wells on forms provided by the department.

(3) Permits to Dispense Water.

(A) Applicability.

1. A water supply meeting all the following conditions is not considered a public water system and as such, is not required to have a permit to dispense if that water supply:

A. Consists only of distribution and storage facilities;

B. Obtains all of its water from, but is not owned or operated by a public water system to which the regulations apply;

C. Does not sell water to any person; and

D. Is not a carrier which conveys passengers in interstate commerce.

2. Water systems serving subdivisions as defined in 10 CSR 60-2.015(2)(S)8. are public water systems and must have a permit to dispense water.

3. Community and noncommunity water systems except as exempted in paragraph (3)(A)1. of this rule must have a permit to dispense water.

(B) Modification or Revocation of a Permit to Dispense. The department may modify or revoke a permit to dispense water, subject to the appeal provisions of section 640.130.5., RSMo, upon a finding that any of the following have occurred:

1. The holder of a permit ceases to function as a public water supply;

2. The holder of a permit fails to correct an operating deficiency or comply with these regulations within a reasonable time after receipt of notice from the department;

3. The department determines that an emergency condition exists in a water supply which endangers, or could be expected to endanger, the health of a person(s) consuming affected water;

4. The public water system changes ownership and the continuing operating authority, as defined in 10 CSR 60-3.020, fails to meet the requirements of 10 CSR 60-3.020; or

5. For community water systems and nontransient noncommunity water systems against which an administrative order has been issued for significant noncompliance with the federal or state drinking water law or regulations, the water system fails to show that a permanent organization exists that serves as the continuing operating authority and that the continuing operating authority has the necessary technical, managerial, and financial capability for the management, operation, replacement, maintenance, and modernization of the public water system, or the water system is not making substantial progress toward compliance. The continuing operating authority may reapply for a permit to dispense when the compliance issues are resolved.

AUTHORITY: sections 640.100 and 640.115, RSMo Supp. 1998. Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Amended: Filed Aug. 13, 1982, effective Dec. 11, 1982. Amended: Filed Aug. 4, 1987, effective Jan. 1, 1988. Amended: Filed July 12, 1991, effective Feb. 6, 1992. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Emergency amendment filed September 20, 1999, effective September 30, 1999, expired March 27, 2000. Amended: Filed July 1, 1999, effective March 30, 2000.*

**Original authority: 640.100, RSMo 1939, amended 1978, 1981, 1982, 1988, 1989, 1992, 1993, 1995, 1996, 1998, 1999; and 640.115, RSMo 1939, amended 1949, 1978, 1998..*

10 CSR 60-3.020 Continuing Operating Authority

PURPOSE: This rule establishes continuing operating authority requirements for public water systems.

(1) Applicability. This rule applies to—

(A) Public water systems commencing operation after October 1, 1999;

(B) Public water systems changing ownership; and

(C) Community water systems and nontransient noncommunity water systems in significant noncompliance.

(2) Definitions.

(A) The terms and definitions in 10 CSR 60-2.015 apply to this rule.

(B) Continuing operating authority means the permanent organization, entity or person identified on the permit to dispense water who is responsible for the management, operation, replacement, maintenance and modernization of the public water system in compliance with the Missouri Safe Drinking Water Law and rules.

(3) Public Water Systems Commencing Operation After October 1, 1999. Owners/operators of public water systems applying for written construction authorizations or permits to dispense water, or both, shall show in accordance with section (6) of this rule, as part of their application, that a permanent organization exists which will serve as the continuing operating authority for the management, operation, replacement, maintenance and modernization of the facility for which the application is made. The department will not issue written construction authorizations and permits to dispense unless the applicant provides proof satisfactory to the department that a continuing operating authority exists that shall have jurisdiction over the facility. Written construction authorizations and permits to dispense water will be issued to the continuing operating authority. The permit shall be valid only for the continuing operating authority to which the permit is issued.

(4) Permit Review Upon Change in Ownership.

(A) Prior to a change of continuing operating authority, the current continuing operating authority shall notify the department of the pending change at least ninety (90) calendar days prior to ownership transfer. The department will perform a permit review within forty-five (45) calendar days of notice of the ownership transfer to assess the following:

1. The proposed continuing operating authority meets the continuing operating authority requirements of this rule;

2. The public water system is in compliance with applicable maximum contaminant levels and monitoring requirements of 10 CSR 60-4.010 through 10 CSR 60-4.110; and

3. The public water system is in compliance with the minimum positive pressure requirement of 10 CSR 60-4.080(9).

(B) The permit to dispense water shall continue in effect until the department takes an action to issue a permit to the proposed new continuing operating authority under subparagraphs (3)(C) 2.A. or B. of this rule or to deny the permit to the proposed new continuing operating authority under subparagraph (3)(C)2.C. of this rule.

1. If the review shows that the proposed continuing operating authority and public water system meet all requirements in subsection (4)(A), the department will issue a new permit to dispense when ownership transfer is complete showing the new owner as the continuing operation authority responsible for the management, operation, replacement, maintenance and modernization of the public water system in compliance with the Missouri Safe Drinking Water Law and rules.

2. If the review shows the new continuing operating authority meets the requirement in paragraph (4)(A)1., but the public water

system does not meet the requirements in paragraphs (4)(A)2. and 3., the department will negotiate an agreement with the proposed continuing operating authority for achieving compliance with these requirements. Upon completion of the agreement and when ownership transfer is complete, the department will issue a new permit to dispense water to the new continuing operating authority.

3. If the review shows the proposed continuing operating authority does not meet the requirement in paragraph (4)(A)1., the permit to dispense water will be denied.

(5) Requirements for Community Water Systems and Nontransient Noncommunity Water Systems in Significant Noncompliance.

(A) Any community public water system or nontransient noncommunity public water system against which an administrative order has been issued for significant noncompliance with the federal Safe Drinking Water Act as amended or sections 640.100–640.140, RSMo or federal or state rules promulgated thereunder shall show that—

1. A permanent organization exists that serves as the water system's continuing operating authority; and

2. The continuing operating authority has the necessary technical, managerial, and financial capability for the management, operation, replacement, maintenance, and modernization of the public water system.

(B) If the public water system cannot show that such continuing operating authority exists, or if the public water system is not making substantial progress toward compliance with the administrative order, the public water system's technical, managerial and financial capacity will be reviewed and the permit to dispense may be revoked. The continuing operating authority may reapply for a permit to dispense when the compliance issues identified in the administrative order are resolved.

(6) Continuing Operating Authorities.

(A) Continuing operating authorities to whom the department will issue written construction authorizations under section (3) of this rule and permits to dispense water are listed here in preferential order. An applicant proposing a facility within the legal boundaries of an existing higher preference continuing operating authority may utilize a lower preference continuing operating authority by submitting, as part of the application, documentation that water service is not available from each existing higher preference continuing operating authority, or a statement from each existing higher preference continuing operating authority waiving its preferential status.

1. Municipality, public water supply district, and water system regulated by the Missouri Public Service Commission (PSC). (Note: Written construction authorizations and permits to dispense water will not be issued to a continuing operating authority regulated by the PSC until the continuing operating authority has obtained a certificate of convenience and necessity from the PSC.)

2. Any person showing complete control over and responsibility for the public water system and all property served by it.

3. Any incorporated association of property owners served by a public water system provided that—

A. The incorporated association owns the facility and has authority to lay all necessary water lines;

B. All property owners within the boundaries of the association have adopted covenants covering the land of each property owner, which assure connection to the system when it is available and compliance with the bylaws and rules of the association;

C. The bylaws of the association, or other appropriate documents, provide for the proper management, operation, replacement, maintenance, and modernization of the facility including at a minimum:

(I) The power to regulate the use of the facility;

(II) The power to levy assessments on its members and enforce these assessments on each owner; and

(III) The power to convey the facility to one (1) of the continuing operating authorities listed in subsection (5)(A) of this rule;

D. The documents establishing the continuing operating authority and the covenants called for in subparagraph (6)(A)3.B. of this rule shall be properly recorded with the recorder of deeds in the county or counties where the land within the boundaries of the association lies and a certified copy of the recorded document shall be provided to the department. Additionally, a current title search certified by a title insurance company authorized to do business in Missouri showing the owners of record of all real estate within the boundaries of the association and all lienholders must be provided to the department; all lienholders must subordinate their interest to the covenants; and

E. The association is incorporated as a corporation under the laws of the state of Missouri and a current Certificate of Good Standing from the Missouri secretary of state and a certified copy of the Articles of Incorporation are provided to the department.

(B) The term "available" as used in subsection (6)(A) of this rule shall mean the water system's distribution line is located within a reasonable distance of the potential water customer; the water system will be accessible in a timely manner that will not cause a hardship on the potential water customer; and the water service will be provided at reasonable cost.

(7) Continuing Operating Authority Responsibilities. To ensure the dispensing of safe and adequate supplies of drinking water to its customers, the continuing operating authority for each public water system shall be responsible for all necessary: source withdrawal facilities, treatment facilities, and/or distribution facilities which the public water system owns or leases. The continuing operation authority shall have such valid lease agreements, contracts and properly recorded easements, as necessary, to allow access for new construction, repair, replacement, maintenance, and operation of all facilities.

(8) Private Water Corporations. Private corporations which are not incorporated under the laws of the state of Missouri shall be represented by a registered agent in the state of Missouri before a written authorization to construct or a permit to dispense water will be issued by the department.

AUTHORITY: sections 640.100 and 640.115, RSMo Supp. 1998. Emergency rule filed Sept. 20, 1999, effective Sept. 30, 1999, expired March 27, 2000. Original rule filed July 1, 1999, effective March 30, 2000.*

**Original authority: 640.100, RSMo 1939, amended 1978, 1981, 1982, 1988, 1989, 1992, 1993, 1995, 1998, 1999; and 640.115, RSMo 1939, amended 1949, 1978, 1998.*

10 CSR 60-3.030 Technical, Managerial, and Financial Capacity

PURPOSE: This rule establishes minimum technical, managerial and financial capacity requirements for community and nontransient noncommunity water systems commencing operation after October 1, 1999. The rule also includes technical and financial capacity recommendations.

(1) Applicability. This rule applies to community and nontransient noncommunity water systems commencing operation after October 1, 1999.

(2) General Requirements.

(A) Community and nontransient noncommunity water systems commencing operation after October 1, 1999, shall show, as part of

their permit application, that the public water system will meet the requirements of this rule. The department will not issue a permit to dispense water until requirements of this rule are met.

(B) Public water systems commencing operation after October 1, 1999 shall show as part of their application that the public water system will meet the minimum technical, managerial, and financial capacity requirements of this rule. The department will not issue a written construction authorization until it determines that the proposed water system will meet the requirements of this rule.

(C) Community and nontransient noncommunity water systems shall maintain compliance with this rule and shall provide the department with information during sanitary surveys and upon written request for the department's use in assessing their compliance with this rule.

(D) Community and nontransient noncommunity water systems subject to this rule shall consider and plan for the potential impact of future regulations on their technical, managerial and financial capacity.

(3) Minimum Technical, Managerial, and Financial Capacity Requirements.

(A) Minimum Technical Capacity Requirements.

1. All community water systems subject to this rule must conform to the department's "Standards for Community Public Water Supplies."

2. All nontransient noncommunity water systems subject to this rule must conform to the department's "Standards for Non-Community Public Water Supplies."

3. All public water systems subject to this rule shall have a sufficient number of operators certified as required in 10 CSR 60-14 to provide proper operation and maintenance of all source, treatment, storage, and distribution facilities so that the public water system meets all requirements of sections 640.100–640.140, RSMo and regulations promulgated thereunder. These operators shall be properly trained and be provided all equipment needed, including safety equipment, to perform all tasks in their job duties.

4. All public water systems subject to this rule shall have and maintain an updated distribution system map showing, at a minimum, the size and location of all waterlines, valves, hydrants, storage facilities, pumping facilities, treatment facilities, and water sources and shall make the map available to the department on request.

(B) Minimum Managerial Capacity Requirements.

1. Community and nontransient noncommunity water systems subject to this rule shall have an organization chart that shows every position that provides any drinking water function with the position title, name, business address, and telephone number of the person filling that position. This chart shall show clear lines of authority and supervision. Elected officials and managers that have overall jurisdiction shall also be shown on this chart. The chart shall state the name(s) of the persons or legal entity who own the public water system along with the business address and telephone number of the owner(s). This chart shall be publicly displayed and shall be updated within thirty (30) calendar days of any changes. An updated copy of the organization chart shall be made available to the department.

2. Community and nontransient noncommunity water systems subject to this rule shall designate a person or persons who will receive customer complaints and shall have a written procedure for receiving, investigating, resolving, and recording customer complaints. The name, title, business address, business telephone number and office hours of the person(s) designated to receive complaints shall be publicly displayed, along with the written complaint procedure. Complaint records shall be kept for a minimum of five (5) years and shall be made available to the department upon request. Results of investigations shall be used as part of the planning process for future improvements.

3. Community and nontransient noncommunity water systems subject to this rule shall have a written rate structure and service fees, and the rate structure and service fees shall be publicly displayed and shall be made available to the department upon request.

4. Community and nontransient noncommunity water systems subject to this rule shall hold at least one (1) public meeting prior to changing the rate structure or service fees and shall notify the customers in advance of the public meeting by posting notice in the principal business office and providing notice in the area served, unless the rate increase procedure is regulated by other state or federal regulations. Records of customers' notice and summary of the public meeting shall be kept for a minimum of five (5) years and shall be made available to the department upon request.

5. Community and nontransient noncommunity water systems subject to this rule shall designate a person to deal with compliance-related issues in accordance with the public drinking water regulations in 10 CSR 60, including reporting and public notice requirements. This person shall be trained in public drinking water regulation requirements and shall act as liaison with the department on drinking water issues. The department will refer compliance actions to this person. The name, position title, business address, business telephone number, and office hours for this person shall be made available to the department and the department shall be notified within thirty (30) calendar days of any change.

(C) Minimum Financial Capacity Requirements.

1. Community and nontransient noncommunity water systems subject to this rule shall adhere to standard accounting practices in accordance with the Generally Accepted Accounting Principles and Practices, or the National Association of Regulated Utility Companies Uniform System of Accounts, as appropriate.

2. Community and nontransient noncommunity water systems subject to this rule shall develop and implement a system of collection of water fees that includes disconnection of service for nonpayment or other measures for obtaining payment. The total of uncollected fees and the percentage of uncollected fees compared to sum of collected and uncollected fees shall be recorded monthly. These records shall be made available to the department upon request.

3. Community and nontransient noncommunity water systems subject to this rule shall develop an annual budget showing public water system revenues and expenditures, shall prepare a report at the end of each fiscal year showing public water system revenues and expenditures for that year and a comparison with the annual budget prepared for that year, and shall prepare a five (5)-year capital improvement budget and capital improvement plan that will be updated annually. The capital improvement plan shall include the potential financial impacts of future regulations. These records shall be kept for a minimum of ten (10) years and shall be made available to the department upon request.

4. Annual revenues shall cover all public water system costs for the system including operating costs, maintenance costs, debt service costs, operating reserves, debt service reserves, emergency equipment replacement reserves, and revenue collection costs.

5. Community and nontransient noncommunity water systems subject to this rule and not subject to state regulation of rates for water service, in addition to all other financial capacity requirements, shall have and maintain—

A. An operating reserve equal to or greater than one-tenth (1/10) of the annual

operations and maintenance budget. The public water system must establish this reserve in at least annual payments not to exceed ten (10) years. Funds from the operating reserve shall be used for operating and maintenance expenses only and shall be replaced within ten (10) years from the date of use. This reserve shall be invested in an account with ready access to the funds. Records of this reserve shall be made available to the department upon request. Other private, state, or federal reserves may be applied to meet this requirement;

B. An emergency equipment replacement reserve equal to or greater than the replacement cost of the most expensive mechanical equipment item needed for operation. The public water system must establish this reserve in at least annual payments over a minimum of ten (10) years. Funds from the reserve shall be used for emergency equipment replacement expenses only and any funds so used shall be replaced within ten (10) years from the date of use. This reserve shall be invested in an account with ready access to the funds. Records of this reserve shall be made available to the department upon request. Other private, state, or federal reserves may be applied to meet this requirement; and

C. If there is debt on the public water system facilities, a debt service reserve no less than ten percent (10%) of the principle and interest or the amount required in the bonding agreement. Funds from the debt service reserve shall be used only for debt service expenses and for purposes agreed to in the bonding agreement and shall be replaced no less than as required in the bonding agreement. Records of this reserve shall be made available to the department upon request.

(4) Recommendations. This section includes recommendations for further enhancing managerial and financial capacity. These recommendations will not be used to determine if minimum regulatory requirements are met for issuance of permits to dispense water.

(A) Managerial capacity recommendations include the following:

1. All public water systems should designate a person to be liaison with other public water systems and officials of entities that may impact drinking water systems. This person should be trained in water resource planning and general public drinking water system issues; and

2. All public water systems should have management with sufficient expertise to ensure that all public drinking water facilities are properly operated, maintained and in compliance with department regulations; improvements needed for future population and commercial growth are properly planned and that these plans are financed and executed; all personnel providing drinking water functions continue to be trained to achieve professional expertise in their field; the personnel are organized and motivated to provide good customer service, good interaction with the department and other regulatory agencies, good interaction with other regional water systems and water users including participating in long-term strategic planning for management of regional water resources; and that the supply finances are fiscally sound.

(B) Financial capacity recommendations include the following:

1. Revenues from drinking water sales should cover all public water system costs for the system including operating costs, maintenance costs, debt service costs, operating reserves, debt reserves, emergency equipment replacement reserves, and revenue collection costs. Capital improvement funding for facilities needed for upgrading the existing system should come from revenue from water sales or other sources of capital. Rates should be set accordingly;

2. New connection fees, development fees, and other funding sources should cover all public water supply capital improvements costs for facilities needed for expanding the system for new customers. Fees should be set accordingly; and

3. All drinking water generated revenues should be used for drinking water purposes. For public water systems owned by entities that provide other services in addition to drinking water, drinking water purposes should include equitable share of administrative costs for the entire entity.

AUTHORITY: sections 640.100 and 640.115, RSMo Supp. 1998. Emergency rule filed Sept. 20, 1999, effective Sept. 30, 1999, expired March 27, 2000. Original rule filed July 1, 1999, effective March 30, 2000.*

**Original authority: 640.100, RSMo 1939, amended 1978, 1981, 1982, 1988, 1989, 1992, 1993, 1995, 1996, 1998, 1999; and 640.115, RSMo 1939, amended 1949, 1978, 1998.*

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
PUBLIC DRINKING WATER BRANCH

SYSTEM NAME: Holtgrewe Farms, LLC Franklin County MO 6031607		
Provided √		**CHECKLIST FOR CONSTRUCTION AUTHORIZATION AND PERMIT TO DISPENSE WATER TO THE PUBLIC** – applicable to new water systems commencing operation after October 1, 1999
√		Engineering Report – 2 copies with Professional Engineer's seal, certified in the state of Missouri;
√		Detailed Plans and Specifications – 2 copies with Professional Engineer's seal on all copies;
√		Application for Construction Authorization – one application completed and signed by Owner/President/Official Custodian.
Provided √	**NA** √	***REQUIRED ITEMS FOR TECHNICAL CAPACITY DEMONSTRATION***
√		Discussion of properly certified operator(s), including acknowledgment of the adequate number of operators having all equipment needed including safety equipment to perform job duties (Note: Designation of the properly certified operator(s) is required prior to issuance of Permit to Dispense.);
√		Acknowledgement of the requirement for the system to maintain an updated distribution map;
√		Acknowledgement there was planning and consideration for the technical capacity impacts of future regulations. The upcoming regulations known as of October 1999 are:
		Interim Enhanced Surface Water Treatment Rule (IESWTR),
		LT-1 Enhanced Surface Water Treatment Rule,
		Ground Water Rule,
		Disinfectants/Disinfection By-Products Rule,
		Radon Rule, and
		Filter Backwash Rule;
DESIGN GUIDE STANDARDS		
√		A description of the proposed new system's service area, a description of service area(s) of nearby system(s);
√		Acknowledgement that a higher preference public water system (defined 10CSR60-3.020(6)(A)) does not exist, is not available as defined in 10 CSR 60-3.030(6)(B), or has provided a statement from the existing system waiving it's preferential status.
√		Extent of the water works system including nature and extent of area to be served, maps of legal boundaries, provisions for extending the water works system to additional areas, and appraisal of future service requirements;
√		An assessment of alternatives including feasibility and practicability, financial considerations including estimated cost of integral parts of the system and comparisons of operator requirements for operation of each alternative;
√		A description of the proposed source(s) quality, capacity, protection, and production.
√		A description of the treatment process proposal, waste disposal, and automation;
√		A description of the project site, including various considerations, potential pollution sources, location with respect to other establishments, houses, etc.;
√		Water Use Data, including population trends and projections, present water consumption, water losses, projected demands, fire flow demand, present and future source yields, etc.
√		Consideration of future extensions for needs;
√		Flow requirements, including hydraulic analyses based on flow demands and pressures and fire flows;
√		A statement that the Engineer will provide certification to the department that construction was completed in accordance with the approved Plans & Specifications.

EM NAME:		
rovided √		***REQUIRED ITEMS FOR MANAGERIAL CAPACITY DEMONSTRATION***
√		Confirmation that a permanent organization exists as the continuing operating authority for the management, operation, maintenance, replacement, and modernization of the facility. Designation of the Continuing Operating Authority is required.
		(If a developer has a plan for a home owner's association, there should be acknowledgement of the following: • the incorporated association owns the facility and has authority to lay all necessary water lines, • an adopted covenant covering the land of each owner, which assures connection to the system if available, • the bylaws of the association provide for the proper operation, maintenance, and modernization of the facility to include at minimum: the power to regulate the use of the facility, the power to levy assessments on members and enforce them on each owner, and the power to convey the facility to a higher COA, as listed in 10 CSR 60-3.020(6)(A).);
√		Acknowledgment the Written Rate Structure and Service Fees will be publicly displayed when in operation;
√		Acknowledgement that a public meeting will be held for changes in rate structure or service fees with advanced notice to customers;
√		Acknowledgement there was planning and consideration for the managerial capacity impacts of future regulations. The upcoming regulations are the same as listed under the Technical Capacity Section;
√		Organizational chart with the name, position, business address and phone number of all positions that provide drinking water functions, including elected officials;
√		Customer complaint designated person, acknowledging that the name, title, business address, business telephone number, and office hours will be publicly displayed;
√		Written Customer Complaint Procedures for receiving, investigating, resolving, and recording customer complaints with the acknowledgement that the Procedure will be publicly displayed;
√		Designated compliance person to be contact for regulatory issues and compliance actions;
√		An Operational Management Plan which describes operating procedures for reliable water system operation, consistent with type of treatment and degree of automatic control, including the process to be used to identify and implement changes to current procedures and ensure that changes in responsible personnel are reported and implemented;
√		Complete an Emergency Operation Plan in accordance with 10 CSR 60-12.010. A model emergency operation plan can be found at http://www.dnr.mo.gov/env/wpp/eop/index.html;
		Present evidence of the ability to produce water meeting applicable MCLs. This involves one year of appropriate monitoring. Until this monitoring is completed, an interim or temporary permit to dispense may be issued.

EM NAME:		
rovided √		***REQUIRED ITEMS FOR FINANCIAL CAPACITY DEMONSTRATION***
√		A statement that Standard Accounting Principles and Practices were used in accordance with either the Generally Accepted Accounting Principals & Practices or the NARUC Uniform Systems of Accounts;
√		A system for water fee collection including measures to obtain payment for non-payment (i.e., disconnect service, late fee charge, etc.). This is usually in the bylaws/covenants but should also be with a separate written rate structure and service fees;
√		Acknowledgement of an annual budget of revenues and expenditures with an annual comparison of planned budget to actual budget**;
√		Written rate structure and service fees;
√		Annual revenues cover public water system costs;
√		A five year budget and capital improvement plan to be updated annually, including at a minimum, annual revenue income, annual estimated cost of operation including salary of operator, Operating Reserve, Emergency Equipment Replacement Reserve, Debt Service Reserve, and proposed methods to finance both capital charges and operating expenses**. The following is a list of typical revenues and expenses for possible consideration in the budget and capital improvement plan: ***Revenues***: Water Rates; Fees and Service Charges; Hookup Charges; Other Revenues as Drinking Water Revenues; etc., ***Other Funds/Resources Available:*** Depreciation Reserves; Capital Contribution from Owner/Stockholder (own source); Contribution/Advance from Customer/Others; Grants; DWSRF Loan; Business loans; Withdrawal from Capital or Other Reserves ***Operating & Maintenance Expenses*** includes Operating Expenses and General & Administrative Expenses: **Operating Expenses**: Salaries and Benefits; Power and Other Utility; Chemicals and Treatment; Monitoring; Materials, Supplies, and Parts; Transportation; etc. **General & Administrative Expenses:** Salaries and Benefits; Office Supplies and Postage; Insurance-vehicles, liability, workers compensation; Legal and Accounting; Contractor/ Professional Services; Fees; Other Deductions, Income Taxes, Other Taxes, etc., ***Reserve Expenses***: Operating Reserve; Emergency Equipment Replacement Reserve; and Debt Service Reserve, ***Capital Improvement Plan Expenses:*** New Capital Facilities; Renewal and Replacement Facilities; Safe Drinking Water Act Facilities; Non-facility Costs; Other Use of Funds; etc., ***Debt Obligation Expenses*** [principal and interest expenses]: Repayment to Customers/others; Repayment of Business Loans; Repayment of SRF Loan; Other Use of Funds; etc., and ***Funded Depreciation Expenses*** in excess of all other p&i payments;
√		Discussion of establishing an Operating Reserve (must = 1/10 of annual operations and maintenance expenses and established over a ten year period in at least equal payments). EX: O&M expenses $8,000, Operating Reserve = $800 by year 10, not including inflation, therefore $80 + inflation per year is minimum reserve;
√		Acknowledgement of an Emergency Equipment Replacement Reserve equal to or greater than the most expensive mechanical equipment item and established in at least equal annual payments over ten (10) years (i.e., if most expensive equipment is $10,000, the minimum yearly reserve must be $1,000/year + inflation);
√		Specify and acknowledge the Debt Service Reserve will equal or exceed the required in bonding agreement;
√		Acknowledgement there was planning and consideration for the financial capacity impacts of future regulations. The upcoming regulations are the same as listed under the Technical Capacity Section.

** **The PDWP has a financial assessment tool which may be utilized upon request to analyze system financial needs based on a five (5) year budget and capital plan. It is optional and may be used simply as a tool for information in preparing a budget and capital improvements plan.**