



Steven L. Beshear  
Governor

Robert D. Vance, Secretary  
Environmental and Public  
Protection Cabinet

Larry R. Bond  
Commissioner  
Department of Public Protection

Commonwealth of Kentucky  
**Public Service Commission**  
211 Sower Blvd.  
P.O. Box 615  
Frankfort, Kentucky 40602-0615  
Telephone: (502) 564-3940  
Fax: (502) 564-3460  
psc.ky.gov

David L. Armstrong  
Chairman

John W. Clay  
Commissioner

June 11, 2008

Ms. Alice G Ritchie  
Knott County Water and Sewer District  
P. O. Box 884  
Hindman, Kentucky 41822

Timothy C. Bates, Esq.  
Office of Knott County Attorney  
P.O. Box 470  
Hindman, Kentucky 41822

Re: Case No. 2008-00177  
Knott County Water and Sewer District

Dear Ms. Ritchie and Mr. Bates:

The enclosed documents have been filed in the record of the above-referenced case. If Knott County Water and Sewer District objects to the filing of these documents, please submit a written objection within five days of the date of this letter.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie L. Stumbo".

Stephanie L. Stumbo  
Executive Director

Encls

**KNOTT COUNTY WATER AND SEWER DISTRICT**

**P.O. BOX 884**

**HINDMAN, KY 41822**

**PHONE: 606-785-5584 TTY 711**

**FAX: 606-785-9231**

**Alice Ritchie, Chair**

**EMAIL: [service@kcwsd.com](mailto:service@kcwsd.com)**

April 23, 2008

George Wakin, P.E., Manager  
Public Service Commission  
Water and Sewer Branch  
Engineering Division  
211 Sower Blvd  
P. O. Box 615  
Frankfort KY 40602-0615

**RECEIVED**

**MAY 7 2008**

**PUBLIC SERVICE  
COMMISSION**

REG: KNOTT COUNTY WATER DISTRICT EMERGENCY

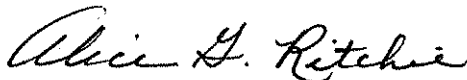
Dear Mr. Wakin:

That this Knott County Water and Sewer District is a duly incorporated special district and subdivision of the Knott County Fiscal Court, as such the following statements apply to said office. And, as a political subdivision of the Fiscal Court is duly organized pursuant to Kentucky Statues and applicable legislation, is in good standing with the Commonwealth of Kentucky, and possesses the legal authority, power, capacity, and right to declare local emergencies where deemed necessary and appropriate for the protection of life and property. According to records as submitted to the District by the Public Service Commission, the identified water storage tank in Pippa Passes, Knott County Kentucky has been condemned.

As Chair of the Knott County Water and Sewer District, I declare a state of emergency as established by resolution # 040908-001 recognizing the potential threat of life and property should the afore mentioned water storage tank fail.

Please contact me at 606-785-5584 if you require further information.

Sincerely,



Alice G. Ritchie, Chair

Cc: Ken Slone, State Director, USDA Rural Development  
Randy Thompson, County Judge Executive  
Greg Mullins, DES Coordinator  
Tim Bates, County Attorney  
Ron Johnson, RM Johnson Engineering

**DECLARATION OF LOCAL  
STATE OF EMERGENCY  
RESOLUTION 040908 – 001**

**WHEREAS**, beginning on April 09, 2008 and continuing, a water emergency occurred in the Knott County Water District's water system impacting customers of the City of Pippa Passes and within Knott County in the Commonwealth of Kentucky resulting in a condemned water storage tank; and

**WHEREAS**, these conditions endanger public health and safety and threaten public and private property; and

**WHEREAS**, state and local governments share responsibilities for protection of public health, safety, and security as well as protection for public and private property and to take appropriate actions and ensure the provisions of essential public services, and

**NOW THEREFORE**, be it resolved by the Knott County Water District that a local state of emergency currently exists; and

**NOW THEREFORE**; be it further resolved that all legal options open to the District by local ordinance and state statute be utilized to the fullest extent in order to address and mitigate to the fullest extent feasible this current emergency, and that the District Chair, Ms. Alice Ritchie is hereby authorized to utilize all resources available in order to address this emergency, sign all related documents and enter into such agreements as are necessary in carrying out the responsibilities of the District to address this emergency.

Vote As Follows:	YEA	NAY	ABSENT
	James Childers Delores Allen Alice Ritchie		Jerry Slone Dale Hamilton

  
Attest

  
Alice Ritchie, Chair  
Knott County Water & Sewer District



COMMONWEALTH OF KENTUCKY  
OFFICE OF THE KNOTT COUNTY ATTORNEY  
P.O. Box 470  
HINDMAN, KENTUCKY 41822

TIMOTHY C. BATES  
COUNTY ATTORNEY

TELEPHONE:  
(606) 785-5355  
FAX:  
(606) 785-3064

April 25, 2008

Mr. Doug Moore  
Area Director  
USDA Rural Development  
100 Nami Drive, Suite 3  
London, Kentucky 40741

RE: KNOTT COUNTY WATER DISTRICT EMERGENCY

Dear Mr. Moore:

Please be advised that the Knott County Water Sewer District is a duly incorporated special district and subdivision of the Knott County Fiscal Court, and as such the following statements apply to said office. As a political subdivision of the Fiscal Court the District is duly organized pursuant to Kentucky statutes and applicable legislation, is in good standing with the Commonwealth of Kentucky, and possesses the legal authority, power, capacity and right to declare local emergencies where deemed necessary and appropriate for the protection of life and property. According to records as submitted to the District by the Public Service Commission, the identified water storage tank in Pippa Passes, Knott County Kentucky has been condemned.

As legal counsel to the Knott County Fiscal Court and speaking with both Alice Ritchie of the Water and Sewer District and Knott County Judge Executive Randy Thompson, I concur with the local emergency declaration as established by resolution number 040908-001.

Please feel free to contact me at 606-785-5355 if you require further information.

Sincerely,

A handwritten signature in cursive script that reads "Timothy C. Bates".

Timothy C. Bates, Knott County Atty.  
Knott County Fiscal Court

cc: Ken Slone, State Director, USDA Rural Development  
Randy Thompson, County Judge Executive  
Greg Mullins, DES Coordinator  
Ron Johnson, RM Johnson Engineering  
Alice G. Ritchie, Knott County Water & Sewer District  
George Wakim, Public Service Commission

**NOTICE OF INTENT TO FILE AN APPLICATION**  
**& NOTICE OF PUBLIC HEARING**

**Knott County Water and Sewer District**

**Tuesday May 20, 2008, 5:30 P.M.**  
**Water District Office**

**This is a formal notice given by the Knott County Water & Sewer District, Hindman, KY. The District intends to apply for a USDA Rural Development Grant, for the Pippa Passes Water Tank Project. This notice is to meet USDA RD instruction and to provide a forum for the public meeting to take place on Tuesday, May 20, 2008, 5:30 P. M. at the Water District Office, Hindman, Knott County KY for the purpose of providing general information to the public regarding the proposed project. The public is invited to attend and comment on such issues as economic and environmental impacts, service area, alternatives to the project or any other pertinent issues.**

**BY: Alice Ritchie,**  
**Chair**  
**Knott Co. Water & Sewer District**

## Smith, Renee C (PSC)

---

**From:** Wakim, George W (PSC)  
**Sent:** Tuesday, June 10, 2008 8:25 AM  
**To:** Goff, James R (PSC); Rice, James D (PSC); Smith, Renee C (PSC)  
**Subject:** FW: Pippa Passes Tank Replacement  
**Attachments:** Letter to RD from RMJE.PDF; Public Meeting.PDF; RD Letter 5-21-08.PDF; RD Letter 6-03-08.PDF; Contractor Estimates.PDF; ALC Preliminary Engineering Report.PDF; Clearinghouse Comments.PDF; DOW Approval.PDF

*George*

NOTICE: This e-mail, and any attachments hereto, is for the sole use of the intended recipient(s) and may contain information that is preliminary and/or confidential. Any unauthorized review, use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender, via e-mail, and destroy all copies of the original message.

---

**From:** Steve Harris [mailto:sharris@rmje.net]  
**Sent:** Monday, June 09, 2008 4:41 PM  
**To:** Wakim, George W (PSC)  
**Cc:** Ron Johnson; Jared Salmons  
**Subject:** Pippa Passes Tank Replacement

George – Here is some information regarding the Pippa Passes Tank Replacement project. The estimated start date of construction is July 1<sup>st</sup>, 2008 and completion date is estimated to be August 18<sup>th</sup>, 2008. Please let us know what information you need to complete the application process. I will forward hard copies to you once you have let me know that this is the info you need. Thanks,

Steve

Stephen R. Harris, EIT, LSIT  
LEED Accredited Professional  
Civil/Project Engineer  
R.M. Johnson Engineering, Inc.  
PO Box 444  
Hindman, KY 41822  
Ph: (606) 785-5926 ext. 34  
Fax: (606) 785-0244

RECEIVED

JUN 09 2008

R. M. JOHNSON ENGINEERING COMPANY PUBLIC SERVICE  
COMMISSION

Telephone  
606-785-5926  
Fax 606-785-0244  
XXXXXXXXXXXXXXXXXXXX  
info@rmje.net



P.O. Box 444  
Hindman, Kentucky 41822

May 6, 2008

Mr. Barry Turner  
USDA Rural Development  
95 South Laurel Road, Ste. A  
London, KY 40744

2008-00177

RE: ALC Tank Replacement and Pippa Passes Tank Rehabilitation Project  
Knott County Water & Sewer District  
Pippa Passes, Kentucky

Dear Mr. Turner:

The Knott County Water & Sewer District (KCWSD) has declared a local state of emergency for the Pippa Passes water system which condemns the existing Alice Lloyd College (ALC) Tank. This declaration is a result from a failed Public Service Commission (PSC) Utilities Inspection Report dated September 12<sup>th</sup>, 2007 which cited the ALC Tank for having "a great deal of rust" and cited the existing Pippa Passes Tank for "scum at the bottom of the tank and rusted screws."

The ALC Tank is an existing 100,000 gallon steel tank that was constructed in the mid-1960's and is showing a large amount of rust and deterioration along the bottom of the tank near the foundation. Lead paint is present, on the outside of the tank, and flakes and peels with minimal effort. The tank is located on the Alice Lloyd College campus at a higher elevation and is situated directly above several ALC facilities. If the tank began to leak rapidly, 100,000 gallons would travel down the mountain causing damage to public and private properties.

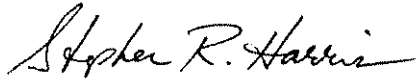
This tank will be replaced by a new 100,000 gallon steel tank that will have the exact dimensions and storage capacity. We plan to place the new tank on the existing concrete foundation and replace the plumbing. The old tank will be removed and disposed of in an environmentally sound manner and in accordance with all local, state, and federal regulations. This will eliminate the public health and safety hazards currently present.

The Pippa Passes Tank is an existing 100,000 gallon glass lined tank that was constructed around 1985 near an ALC-owned housing unit. The screw bolts, which hold the tank components together and prevent leaks, are showing some rust and deterioration. We are proposing to hand brush the bolts to remove all rust, and then place an epoxy sealant and protective plastic cap over the bolt to prolong the life of the fasteners. We will also install sacrificial cathodic protection which prevents the rusting of the inside of the tank. These maintenance measures will remedy the problem associated with this tank and extend the longevity of its service.

The anticipated schedule for the construction and/or maintenance for the two tanks is proposed to begin in early June and finish sometime in early August. This schedule takes advantage of the fact that ALC does not offer courses during these months, thus reducing the daily water demand. The detailed schedule will be set so that one tank is available for storage while the other is temporarily taken offline. Construction will be complete and both tanks will be online before ALC resumes courses in the Fall Term.

If you have any questions regarding the contents of this letter please feel free to contact me at (606) 785-5926 or by email at [sharris@rmje.net](mailto:sharris@rmje.net).

Sincerely,  
RM JOHNSON ENGINEERING, INC.



Stephen R. Harris, EIT, LSIT  
Project Engineer

Cc: Alice Ritchie, KCWSD  
Ron Johnson, PE, RMJE  
File



**NOTICE OF INTENT TO FILE AN APPLICATION  
& NOTICE OF PUBLIC HEARING**

**Knott County Water and Sewer District**

**Tuesday May 20, 2008, 5:30 P.M.  
Water District Office**

**This is a formal notice given by the Knott County Water & Sewer District, Hindman, KY. The District intends to apply for a USDA Rural Development Grant, for the Pippa Passes Water Tank Project. This notice is to meet USDA RD instruction and to provide a forum for the public meeting to take place on Tuesday, May 20, 2008, 5:30 P. M. at the Water District Office, Hindman, Knott County KY for the purpose of providing general information to the public regarding the proposed project. The public is invited to attend and comment on such issues as economic and environmental impacts, service area, alternatives to the project or any other pertinent issues.**

**BY: Alice Ritchie,  
Chair  
Knott Co. Water & Sewer District**

**Agenda**  
**Knott County Water & Sewer District**  
**Public Hearing**  
**USDA Rural Development**  
**Rural Utility Service Grant Program**  
**Wednesday, June 4, 2008**  
**5:30 PM District Offices**

- I.           **Introductions**
  
- II.           **Grant Information:**
  - 1. Funds Available
  - 2. Funding Levels and Types of Applications
  - 3. Intent to apply
  
- III.           **Local Evaluation**
  - 1. Citizen's views of Development Needs
  - 2. Citizen's views of Proposed Project
  
- IV.           **Past Performance and Evaluation Update**
  
- V.            **Project Goals**
  
- VI.           **Adjourn**

## Funds invested in rural Kentucky From October 1, 2006 through September 30, 2007

Business	\$ 8,841,965
Community Facilities	\$ 10,193,088
Single Family Housing	\$ 172,245,001
Multifamily Housing	\$ 10,590,426
Water and Environmental	\$ 47,040,450
Distance Learning & Telemedicine	\$ 931,658
Broadband	\$ 177,487
Electric	\$ 92,655,000
ARC	<u>\$ 4,237,355</u>
<b>Total Invested</b>	<b>\$346,912,430</b>

*"It is in our vital interest to diversify America's energy supply—the way forward is through technology. We must continue changing the way America generates electric power, by even greater use of . . . solar and wind energy, and clean, safe nuclear power. . . We must continue investing in new methods of producing ethanol—using everything from wood chips to grasses, to agricultural wastes." President George W. Bush*

*"Our rural communities are the home and heart of American agriculture. . ." Chuck Conner, Acting Secretary of Agriculture*

*"We have the privilege of working for an agency that touches people's lives, that strengthens communities, that builds hope one business, one job, and one home at a time . . ." Thomas C. Dorr, Under Secretary of Rural Development*

*"USDA Rural Development employees in Kentucky are very committed to assisting rural residents in our State with their needs. By reviewing our Annual Report, you can see the accomplishments made in Kentucky during Fiscal Year 2007." Kenneth Stone, State Director*

[www.rurdev.usda.gov/ky](http://www.rurdev.usda.gov/ky)



The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice), or (202) 720-6382 (TDD). "USDA is an equal opportunity provider, employer, and lender".

## **WATER AND WASTE DISPOSAL LOANS AND GRANTS**

**Purpose:** To increase the availability of public water and waste disposal systems in rural areas thereby reducing pollution and ensuring rural residents a reliable source of potable water

**Program Type:** Loan guarantees, direct loans and, if needed to keep user rates reasonable, grants

**Eligible Applicants:** Public bodies, special purpose districts, Indian tribes, and nonprofit corporations

**Eligible Areas:** Cities and unincorporated rural areas with populations of 10,000 or less; preference give to areas of 5,500 or less.

**Authorized Purposes:** Funds are used to develop new water and wastewater systems, enlarge or rehabilitate existing systems, and merge small systems

**Rates and Terms:** Interest rates for guaranteed loans are negotiated with the lender; rates for the direct loan is based on market conditions; loan terms are 40 years but not to exceed the useful life of the facility

**When to Apply:** Year round

**Who to Contact:** Kentucky Rural Development's Utilities Programs office can be reached at 859/224-7336



United States Department of Agriculture  
Rural Development  
Kentucky State Office

May 21, 2008

Alice Ritchie, Chairperson  
Knott County Water District  
P.O. Box 884  
Hindman, Kentucky 41822

Dear Ms. Ritchie:

This letter establishes conditions which must be understood and agreed to by you before further consideration may be given to the application. The grant will be administered on behalf of the Rural Utilities Service (RUS) by the State and Area office staff of USDA Rural Development. Any changes in project cost, source of funds, scope of services or any other significant changes in the project or applicant must be reported to and approved by USDA Rural Development, by written amendment to this letter. Any changes not approved by Rural Development shall be cause for discontinuing processing of the application. It should also be understood that Rural Development is under no obligation to provide additional funds to meet an overrun in construction costs.

This letter is not to be considered as grant approval or as a representation as to the availability of funds. The docket may be completed on the basis of a RUS grant not to exceed \$375,000, a Knott County Fiscal Court local contribution in the amount of \$125,000.

Please complete and return the attached Form RD 1942-46, "Letter of Intent to Meet Conditions," if you desire that further consideration be given to your application.

The "Letter of Intent to Meet Conditions" must be executed within three weeks from the date of this letter or it becomes invalid unless a time extension is granted by Rural Development.

If the conditions set forth in this letter are not met within 210 days from the date hereof, Rural Development reserves the right to discontinue the processing of the application.

In signing Form RD 1942-46, "Letter of Intent to Meet Conditions," you are agreeing to complete the following as expeditiously as possible:

1. Number of Users and Their Contribution:

There shall be 716 water users, of which all are existing users. The Area Director will review and authenticate the number of users and amount of connection fees prior to advertising for construction bids.

771 Corporate Drive • Suite 200 • Lexington, KY 40503  
Phone (859) 224-7336 • Fax (859) 224-7444 • TDD (859) 224-7422 • Web <http://www.rurdev.usda.gov/ky>

Committed to the future of rural communities

USDA is an equal opportunity provider, employer and lender.  
To file a complaint of discrimination write USDA, Director, Office of Civil Rights,  
1400 Independence Avenue, SW, Washington, DC 20250-9410  
or call (800) 795-3272 (voice) or (202) 720-6382 (TDD)

2. Grant Agreement:

Attached is a copy of RUS Bulletin 1780-12, "Water and Waste System Grant Agreement." for your review. You will be required to execute a completed form at the time of grant closing.

3. Drug-Free Work Place:

Prior to grant closing, the District will be required to execute Form AD-1049, "Certification Regarding Drug-Free Workplace Requirements (Grants) Alternative I - For Grantees Other Than Individuals."

4. Land Rights and Real Property:

The District will be required to furnish satisfactory title, easements, etc., necessary to install, maintain and operate the facility to serve the intended users. The pipelines will be on private rights-of-way where feasible. Easements and options are to be secured prior to advertising for construction bids.

5. Organization:

The District will be legally organized under applicable KRS which will permit them to perform this service.

6. Business Operations:

The District will be required to operate the system under a well-established set of resolutions, rules and regulations. A budget must be established annually and adopted by the District after review by Rural Development. At no later than grant closing, the District will be required to furnish a prior approved management plan to include, as a minimum, provisions for management, maintenance, meter reading, miscellaneous services, billing, collecting, delayed payment penalties, disconnect/reconnect fees, bookkeeping, making and delivering required reports and audits.

7. Accounts, Records and Audits:

The District will be required to maintain adequate records and accounts and submit annual budgets and year-end reports (annual audits), in accordance with subsection 1780.47 of RUS Instruction 1780.

The District will be required to establish and maintain separate accounts for each system. Annual audits, budgets, and reports will be submitted to Rural Development showing separate accounts.

8. Insurance and Bonding:

The following insurance and bonding will be required:

- A. Adequate Liability and Property Damage Insurance including vehicular coverage, if applicable, must be obtained and maintained by the District. The District

should obtain amounts of coverage as recommended by its attorney, consulting engineer and/or insurance provider.

- B. Worker's Compensation - The District will carry worker's compensation insurance for employees in accordance with applicable state laws.
- C. Real Property Insurance - The District will obtain and maintain adequate fire and extended coverage on all structures including major items of equipment or machinery located in the structures. The amounts of coverage should be based on recommendations obtained by the District from its attorney, consulting engineer and/or insurance provider. Subsurface lift stations do not have to be covered except for the value of electrical and pumping equipment therein.
- D. Flood Insurance - The District will obtain and maintain adequate coverage on any facilities located in a special flood and mudslide prone areas.

9. Planning and Performing Development:

- A. The engineer should not be authorized to commence work on final plans and specifications until a determination has been made that the project can be planned and constructed within the estimated cost shown in paragraph "17" of this letter. The engineer may then proceed to develop final plans and specifications to be completed no later than 180 days from this date, and prepare bid documents. The Area Director is prepared to furnish the necessary guide to follow so as to keep the project plans and documents within our guidelines and requirements. The project should not be advertised for construction bids until all easements and enforceable options have been obtained, and total funds are committed or available for the project.
- B. The following documents will be submitted to Rural Development for review and must be concurred in by Rural Development prior to advertisement for construction bids:
  - 1. Final plans, specifications and bid documents.
  - 2. Applicant's letter on efforts to encourage small business and minority-owned business participation.
  - 3. Legal Service Agreements.
  - 4. Engineering Agreements.

Revision in these documents will be subject to Rural Development concurrence. Any agreements, contracts, etc. not reviewed and approved by Rural Development will not be eligible for payment from project funds or revenues from facilities financed by this Agency.

Prior to receipt of an authorization to advertise for construction bids, the District will obtain advance clearance from Local Counsel regarding compliance with KRS 424 pertaining to publishing of the advertisement for construction bids in local newspapers and the period of time the notice is required to be published.

10. Civil Rights & Equal Opportunity:

You should be aware of and will be required to comply with other federal statute requirements including but not limited to:

A. Section 504 of the Rehabilitation Act of 1973:

Under Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), no handicapped individual in the United States shall, solely by reason of their handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Rural Development financial assistance.

B. Civil Rights Act of 1964:

All grantees are subject to, and facilities must be operated in accordance with, Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and Subpart F of Part 1901 of this Title, particularly as it relates to conducting and reporting of compliance reviews. Instruments of conveyance for loans and/or grants subject to the Act must contain the covenant required by paragraph 1901.202(e) of this Title.

C. The Americans with Disabilities Act (ADA) of 1990:

This Act (42 U.S.C. 12101 et seq.) prohibits discrimination on the basis of disability in employment, state and local government services, public transportation, public accommodations, facilities, and telecommunications. Title II of the Act applies to facilities operated by state and local public entities that provide services, programs, and activities. Title III of the Act applies to facilities owned, leased, or operated by private entities that accommodate the public.

D. Age Discrimination Act of 1975:

This Act (42 U.S.C. 6101 et seq.) provides that no person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

Rural Development financial programs must be extended without regard to race, color, religion, sex, national origin, marital status, age, or physical or mental handicap.

11. Closing Instructions:

The State Director, will be required to write closing instructions in connection with this grant. Conditions listed therein must be met by the District.

12. Compliance with Special Laws and Regulations:

The District will be required to conform to any and all state and local laws and regulations affecting this type project.



13. Treatment Plant and System Operator:

The District is reminded that the treatment plant and system operator must have an Operator's Certificate issued by the State.

14. Prior to Closing the Grant, the District Will Be Required to Adopt:

- A. Form RD 400-1, "Equal Opportunity Agreement."
- B. Form RD 400-4, "Assurance Agreement."
- C. Form AD-1047, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transaction."
- D. RD Instruction 1940-Q, Exhibit A-1, "Certification for Contracts, Grants and Loans."
- E. RUS Bulletin 1780-22, "Eligibility Certification."

15. Disbursement of Project Funds:

A construction account for the purpose of disbursement of project funds (RUS) will be established by the District prior to start of construction. The position of officials entrusted with the receipt and disbursement of RUS project funds will be covered by a "Fidelity Bond," with USDA Rural Development as Co-Obligee, in the amount of construction funds on hand at any one time during the construction phase.

For each "construction account" as established, if the amount of RUS grant funds plus any applicant contributions or funds from other sources to be deposited into the account are expected to exceed \$100,000 at any time, the financial institution will secure the amount in excess of \$100,000 by pledging collateral with the Federal Reserve Bank in an amount not less than the excess in accordance with 7 CFR, 1902.7(a).

During construction, the District shall disburse project funds in a manner consistent with subsection 1780.76 (e) of RUS Instruction 1780. Form RD 1924-18, "Partial Payment Estimate," or similar form approved by Rural Development, shall be used for the purpose of documenting periodic construction estimates, and shall be submitted to Rural Development for review and acceptance. Prior to disbursement of funds by the District, the Board of Directors shall review and approve each payment estimate. All bills and vouchers must be approved by Rural Development prior to payment by the District.

Form RD 440-11, "Estimate of Funds Needed for 30-Day Period Commencing \_\_\_\_\_," will be prepared by the District and submitted to Rural Development in order that a periodic advance of federal cash may be requested.

Grantees receiving federal grant funds by EFT will have funds directly deposited to a specified account at a financial institution with funds being available to the recipient on the date of payment. The borrower should complete Form SF-3881, "Electronic Funds Transfer Payment

Enrollment Form." for each account where funds will be electronically received. The completed form(s) must be received by Rural Development at least thirty (30) days prior to the first advance of funds.

Monthly audits of the District's construction account records shall be made by Rural Development.

16. Disbursement of Grant Funds:

The RUS funds will be advanced as they are needed in the amount(s) necessary to cover the RUS proportionate share of obligations due and payable by the District. Grant funds, upon receipt, must be deposited in an interest bearing account in accordance with 7 CFR part 3016 (as applicable). Interest earned on grant funds in excess of \$100 (as applicable) per year will be submitted to RUS at least quarterly.

17. Cost of Facility:

Breakdown of Costs:

Development	\$ 380,000
Legal and Administrative	4,053
Engineering	78,447
Contingencies	<u>37,500</u>
TOTAL	\$ 500,000

Financing:

RUS Grant	\$ 375,000
Fiscal Court Contribution	<u>125,000</u>
TOTAL	\$ 500,000

18. Commitment of Other Project Funds:

This Letter of Conditions is issued contingent upon a firm commitment being in effect prior to advertising for construction bids and for the Knott County Fiscal Court contribution in the amount of \$125,000.

19. Use of Remaining Project Funds:

The Fiscal Court contribution shall be considered as the first funds expended. After providing for all authorized costs, any remaining project funds will be considered to be RUS grant funds and refunded in proportion to participation in the project.

20. Proposed Operating Budget:

You will be required to submit to Rural Development a copy of your proposed annual operating budget that supports the proposed project prior to this agency giving you written authorization to proceed with the bidding phase. The operating budget should be based on a typical year cash

flow, subject to completion of this project in the first full year of operation. Form RD 442-7, "Operating Budget," or similar form may be utilized for this purpose.

21. Rates and Charges:

Rates and charges for facilities and services rendered by the District must be at least adequate to meet cost of maintaining, repairing and operating the water system and meeting required principal and interest payments and the required deposits to debt service and/or depreciation reserve.

Water rates will be at least:

¾" meter

First	2,000	gallons @ \$	18.25 - Minimum Bill.
Next	8,000	gallons @ \$	5.63 - per 1,000 gallons.
All Over	10,000	gallons @ \$	4.55 - per 1,000 gallons.

Water rates will be at least:

2" meter

First	15,000	gallons @ \$	86.00 - Minimum Bill.
All Over	15,000	gallons @ \$	4.55 - per 1,000 gallons..

22. Compliance with the Bioterrorism Act:

Prior to closing the grant, the District will provide a certification they have completed a Vulnerability Assessment (VA) and prepared an emergency response plan (ERP) as required by the Safe Drinking Water Act (SDWA).

23. Floodplain Construction:

The District will be required to pass and adopt a Resolution or amend its By-Laws whereby the District will deny any water service to any future customer wishing to build on or develop property located within a designated floodplain. If a customer or developer requests service for construction in a designated floodplain, the customer or developer must provide evidence and a justification for approval by the District and Rural Development officials that there are no other alternatives to construction or development within the designated floodplain. The community must be a participant in the National Flood Insurance Program (NFIP) and the customer or developer must obtain the required permits prior to the tap on restrictions being waived.

24. Mitigation Measures:

- A. The project shall be in compliance with all requirements noted in the Governor's Office for Local Development letter dated February 13, 2008, from Ms. Lee Nalley.

- B. The design and construction shall be in compliance with all local, state and federal environmental statutes, regulations and executive orders applicable to the project.
- C. Best Management Practices shall be incorporated into the project design, construction, and maintenance.

25. Final Approval Conditions:

Final approval of this assistance will depend on your willingness, with the assistance of all your co-workers, to meet the conditions of this letter in an orderly and systematic manner. Then too, final approval will depend on funds being available.

If you desire to proceed with your application, the Area Director will allot a reasonable portion of time to provide guidance in application processing.

Sincerely,

  
KENNETH SLONE  
State Director

Enclosures

cc: Area Director - London, Kentucky  
KY River ADD - Hazard, Kentucky  
Timothy C. Bates - Hindman, Kentucky  
✓ RM Johnson Engineers - Hindman, Kentucky  
PSC - ATTN: Dennis Jones - Frankfort, Kentucky



United States Department of Agriculture  
Rural Development  
London Area Office

June 3, 2008

Knott Co. Water & Sewer District  
Attn: Alice Ritchie, Chairperson  
P.O. Box 884  
Hindman, KY 41822

COPY

RE: Pippa Passes Water Storage Tank Project  
RUS Loan- \$262,500/RUS Grant - \$112,500

Dear Chairperson:

We have reviewed your application for federal assistance from the Rural Utilities Service (RUS) and have determined that your proposal is:

- eligible for funding by this Agency and can compete with similar applications from other grantees.
- eligible, but does not have the priority necessary for further consideration at this time.

Based upon the funds available for this program over the last two fiscal years and the number of applications reviewed or pending, we:

- anticipate that funds for which you are competing will be available within twelve (12) months.
- are unable to determine at this time when funds will be available.

In your application, you requested \$500,000 in Federal funding and we:

- are agreeable to consideration of approximately this amount.
- will need to analyze the amount requested in more detail.

A processing conference  will  will not be necessary. We are recommending that it be held at a date & time to be determined. For confirmation, please contact the undersigned at 100 Nami Plaza, Suite #3, London, KY 40741. Telephone number (606) 864-5168, EXT 126.

The Attachment hereto will provide additional details on the application status and processing.

Sincerely,

  
DOUGLAS MOORE  
Area Director

Attachment

Cc: RD State Office - Lexington, KY	File Copy	Hazard Area Office
RM Johnson Engineering - Hindman, KY	KY River ADD	

100 Nami Plaza, Suite #3, London, KY 40741  
Phone: (606) 864-2172 • Fax: (606) 878-7717 • TDD: (859) 224-7422 • Web: <http://www.rurdev.usda.gov/ky>

Committed to the future of rural communities.

"USDA is an equal opportunity provider, employer and lender."  
To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14<sup>th</sup> and Independence Avenue, SW, Washington, DC 20250-9410 or call: (202) 720-6984 (voice or TDD).

## Attachment

### "Notice of Application Review Action"

**Date:** June 3, 2008

**Applicant:** Knott Co. Water & Sewer District

This will serve as notification that the Pippa Passes tank project has been selected for consideration to receive funding from Rural Utilities Service (RUS). This does not mean the requested loan/grant will be approved. RUS funds for which you are competing are anticipated to be available in the following amount: \$375,000 RUS grant. This amount is a preliminary indication only and should not be considered as assurance of availability or amount(s) of funds. This action is subject to the results of an Environmental Review, project feasibility, and your ability to secure a firm commitment of supplemental funding from other sources, if applicable.

The grant request will be administered on behalf of the Rural Utilities Service (RUS) by the State and District Office of USDA/Rural Development.

You are advised against incurring obligations which would limit the range of alternatives to be considered or which would limit the range of alternatives to be considered or which would have an adverse effect on the environment. Satisfactory completion of the Environmental Review process must occur prior to the issuance of the Letter of Conditions.

This Agency reserves the right to terminate the processing of your application if the information requested at the processing conference is not submitted in a timely manner. If this should occur, you will be notified in writing of this action.

# LAUREL CONSTRUCTION CO., INC.

5209 SOMERSET ROAD  
LONDON, KENTUCKY 40741

DELMAS PHILPOT  
PRESIDENT

(606) 878-8812

April 28, 2008

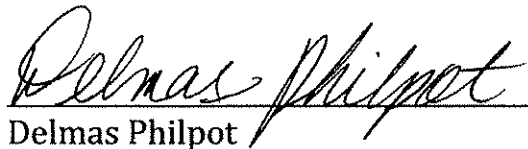
Attn: Ron Johnson  
R.M. Johnson Engineering, Inc.  
3376 Highway 550 East  
P.O. Box 444  
Hindman, Kentucky 41822-0444

Dear Ronnie,

We propose to remove the old tank behind the college and grade the existing ground so that the existing foundation is about 6" above the ground. We will have a geotechnical engineer with a Kentucky stamp certify the concrete foundation and Laurel Construction Co., Inc. will certify that the tank has been built according to the AWWA D-100 code. If the existing foundation is not sound and has to come out, we will charge for the additional cost.

Our revised price is \$144,000.00. This price will be good until May 23, 2008. Steel is going to increase again on June 1<sup>st</sup>, 2008. We don't have to have a contract by this date, but we will have to have a letter stating that our price has been accepted and that we will be awarded a contract for this project.

Call me with any questions. Thank you.

  
\_\_\_\_\_  
Delmas Philpot

DP/mc

# WELDING, INC.

AWWA—WATER STORAGE TANKS  
GENERAL & UTILITY CONTRACTORS  
BOILER SALES, SERVICE, REPAIRS &  
INSTALLATIONS

1712 PENNSYLVANIA AVE.  
P.O. BOX 6007  
CHARLESTON, W. VA. 25362  
(304) 346-0763  
FAX (304) 343-5498  
WV CONT. #002219

ASME - API - CODE TANKS  
PRESSURE VESSELS  
CERTIFIED CODE SHOP  
ASME BOILER CODE  
"R", "PP" & "U" STAMPS

May 2, 2008

Stephen R. Harris, EIT, LSIT, Project Engineer  
R. M. Johnson Engineering, Inc.  
P. O. Box 444  
Hindman, KY 41822

Phone (606) 785-5926 ext 34  
FAX (606) 785-0244

Subject: Proposal for Water Tank Replacement  
Alice Lloyd College, Pippa Passes, KY

Dear Mr. Harris:

We are pleased to propose the following for your consideration.

For furnishing all necessary labor, material, equipment and tools to provide necessary engineering, bonding, design, fabrication, erection and painting to complete a turnkey project for replacement of the existing 27' dia. x 24' tall water storage tank.

Work to consist of:

Site work to provide space to set up crane for dismantling and erection of new tank and remove soil against existing tank.

Upgrade existing access road from existing pavement (Approx. 120 LF) to gain access to site. Install approx. 6" of stone on road upon completion of project.

Dismantle existing tank and dispose of scrap steel.

Provide Engineer Report by KY PE that existing foundation is acceptable to reinstall the same size tank on the existing foundation or recommendations for modifications to the existing tank foundation for installation of a new same size tank.

Install approx 3" of new oiled sand on top of existing foundation.

Fabricate, erect and paint new 27' diameter x 24' tall AWWA D-100 water storage tank. 1/4" thick A-36 steel floor and shell, 3/16" thick self supporting roof.

This work will be completed within 90 days during the period of June 1, 2008 through August 30, 2008.

LUMP SUM PRICE: \$145,000.00

Please note if inlet pipe requires replacement it will be an extra charge. The existing paved roads were not designed for heavy equipment and if any damage is claimed due to equipment access it will be repaired at an additional charge.



We do not anticipate replacement or modifications of the existing foundation as a result of the examination and report by an KY licensed Professional Engineer. If required the maximum amount for complete removal and replacement of the existing foundation would not exceed an additional \$40,000.00.

Thank you for the opportunity to quote this project. We look forward to being of service.

Sincerely yours,

Welding, Inc.

A handwritten signature in cursive script, appearing to read "Bruce Carroll".

# **PRELIMINARY ENGINEERING REPORT**

FOR

## **ALC Tank Replacement & Pippa Passes Tank Rehabilitation Projects**

PREPARED FOR:

**Knott County Water & Sewer District**

P.O. Box 884  
Hindman, KY 41822  
Ph: (606) 785-5584  
Fax: (606) 785-9231  
Email: kcwsd@tgtel.com

SUBMITTED BY:



**R.M. JOHNSON ENGINEERING, INC.**

P.O. Box 444  
Hindman, KY 41822

March 2008

**Table of Contents**

**Introduction ..... 1**

**Project Need ..... 2**

**Alternative Water Sources ..... 3**

**Existing Facilities ..... 4**

**Proposed Facilities ..... 6**

**Water System Operations ..... 7**

**Land, Water, and Other Rights & Permits ..... 8**

**Source of Funds ..... 9**

**Conclusions ..... 10**

**Recommendations ..... 11**

## Preliminary Engineering Report

### INTRODUCTION

On behalf of the Knott County Water and Sewer District (KCWSD) we, at R.M. Johnson Engineering, Inc., are pleased to present this Preliminary Engineering Report for the Alice Lloyd College (ALC) Tank Replacement and the Pippa Passes Tank Refurbishment projects.

A routine inspection was performed by Mr. Joe Greenwell for the Public Service Commission (PSC) on September 11<sup>th</sup>, 2007. Mr. Greenwell's findings resulted in the recommendation to perform rehabilitation and maintenance for the two subject tanks referenced above.

In response, the KCWSD has applied for \$500,000 of funding to rehabilitate the Pippa Passes Tank and replace the ALC Tank. The 108,000 gallon ALC Tank will be completely replaced due to its poor condition. The 108,000 gallon Pippa Passes Tank will undergo overdue maintenance and refurbishment to restore the tank to proper conditions. The two tanks currently serve 444 customers in the Pippa Passes area, including Alice Lloyd College which generally has around 500 students per semester, and are major contributors to the water system in Knott County.

## Preliminary Engineering Report

### PROJECT NEED

The immediate need for this project is mostly due to the recommendations made by the PSC's Utility Inspection Report dated September 11, 2007. The findings show that the ALC Tank currently has "a great deal of rust" and the Pippa Passes Tank has "scum at the bottom of the tank and rusted screws." The PSC Utility Inspection Report can be found in Appendix 'A'.

The two tanks feed all customers along Route 899 (including Alice Lloyd College), along with all branch lines, and eventually customers along Route 7. The tank also assists in supplying water to the newly constructed 38,000 gallon tank located at the top of Slone Fork Mountain. The Slone Fork and Watts Fork waterlines were constructed last year, which opened the opportunity for 144 new customers to come online. The project map, located in Appendix 'B', shows the locations of the tanks and their partial services areas.

The two subject tanks are supplied water by the Water Treatment Plant located on Alice Lloyd College's campus. Pumps at the plant supply the tanks with potable water that is then distributed throughout the service areas.

**ALTERNATIVE WATER SOURCES**

The alternative water sources for the customers currently served by these tanks would be private wells, springs, or cisterns. Over time, private wells have proven to be unreliable and often unsuitable for drinking. Due to mining activities in the area the water table can suddenly drop without notice, leaving the well unexpectedly empty and the household without water. Hauling water for cisterns has proven to be very expensive. Hauled water costs can easily exceed \$25.00 per thousand gallons, resulting in an average monthly cost of \$50.00 and higher. A high number of customers may not have the resources necessary to purchase and/or transport the water. Given these circumstances there seems to be no feasible alternate for serving the community with potable water.

**EXISTING FACILITIES**

There are currently two water supply systems in Knott County. The City of Hindman owns and operates a water treatment plant in downtown Hindman, while the KCWSD owns and maintains the plant located on Alice Lloyd College's campus. A new 2 MGD water treatment plant is currently being constructed near Carr Fork Lake and is set to come online in early 2009.

***City of Hindman Water Treatment Facility***

The City of Hindman Water Treatment Facility is supplied by wells located in Hindman. Because the supply comes from wells the system has recently shown vulnerability due to the combination of unreliable well recharge, customer demand, and precipitation drought. The City of Hindman acquires additional water from Southern Water & Sewer District located in McDowell in Floyd County, and from the Knott County Water & Sewer District in Hindman. The services areas include downtown Hindman, portions of Route 899, Route 550, Mousie, etc.

***KCWSD Water Treatment Facility***

The water system, located in Pippa Passes, KY, was acquired several years ago by the KCWSD from the Caney Creek Water District. The system consisted of drilled wells, the ALC tank, the Pippa Passes tank, a water treatment facility, and water mains. Since its purchase, the KCWSD has expanded the service area by constructing a new 38,000 gallon tank on Slone Fork Mountain, a centrifugal pump to supply the tank, and water mains to 144 new potential customers.

In 2007, the KCWSD completed more than 30 miles of waterline extensions, installed several pumps, and two tanks, thus expanding its service area to provide potable water to nearly 600 households. This year, 2008, the KCWSD will expand its service area once again, to provide potable water to nearly 400

Preliminary Engineering Report

new customers. The well-anticipated 2 MGD Carr Fork Water Treatment Plant is set to be completed in early 2009.

The completion of this project allows the KCWSD to expand its services widely throughout the county. This also creates the capacity to interconnect with other water systems in adjoining counties such as Perry and Letcher.



## Preliminary Engineering Report

### **PROPOSED FACILITIES**

The KCWSD is seeking funds to plan, design, rehabilitate, and replace all necessary components of the two tanks located at Pippa Passes, KY. The scum at the bottom of the Pippa Passes Tank will be removed, and the rusted screws sandblasted, then covered and protected. The old ALC Tank will be dismantled and exposed of in an environmentally friendly manner due to the presence of lead paint. The existing foundation will be utilized as the foundation for the replacement tank. The rehabilitation and replacement of these two tanks will restore the water system to its original scope and capacity and provide the service area with adequate storage.

**WATER SYSTEM OPERATIONS**

The replacement of the ALC Tank will affect the water system operations minimally, if any. Since we are matching the exact height and storage capacity of the original tank the high service pumps will not need to be replaced and will continue to be sufficient.

The rehabilitation of the Pippa Passes Tank will include cleaning the scum from the bottom of the tank and sandblasting, covering, and protecting the screws. Once this has been completed the tank will be restored to a condition that satisfies the PSC and continues to serve as storage for the Pippa Passes area.

Once these improvements are made the KCWSD will provide adequate staffing to effectively and correctly operate and maintain the structures.

**LAND, WATER, AND OTHER RIGHTS & PERMITS**

***Land Acquisition & Easement Rights***

The KCWSD already owns the land and/or permanent easements to be utilized during construction. No additional land will be needed. Temporary construction easements for access and storage areas may be required during construction activities. The KCWSD will take full responsibility for obtaining any easements necessary from the appropriate property owner.

***Water Rights***

All water that will supply the tanks comes from the KCWSD's water supply wells. No additional water rights will be obtained to adequately serve the customer demand.

***Other Rights & Permits***

A Kentucky Division of Water (DOW) Permit may be needed to approve the materials of the replacement ALC Tank. Since the Pippa Passes Tank disturbs no ground this is essentially the only permit necessary to complete this project. A Kentucky Pollutant Discharge Elimination System (KPDES) storm water discharge permits will only be necessary if more than one (1) acre of ground is disturbed while constructing the replacement ALC Tank.

Preliminary Engineering Report

**SOURCE OF FUNDS**

***Rural Development & Coal Severance***

A Pre-Application has been submitted to Rural Development for the request of \$375,000. This is 75% of the total estimated project cost of \$500,000. The remaining \$125,000 will be paid by the KCWSD using Coal Severance monies.

**CONCLUSIONS**

- 1.) The PSC Utility Inspection Report dated September 12, 2007 found the two subject tanks to be in need of maintenance and repair.
- 2.) The tanks combine for a total storage of 216,000 gallons and currently serve 444 customers in the Pippa Passes area. The tanks water supply comes from the water treatment plant located on Alice Lloyd College's campus.
- 3.) The Pippa Passes Tank has scum deposited on the bottom of the tank and the screws are badly rusted. This tank will undergo rehabilitation by removing and cleaning the tank, and sandblasting the screws, covering, and protecting them.
- 4.) The ALC Tank is showing a great deal of rust. The old tank will be dismantled and disposed of in a safe manner, and a new tank with the same capacity will be installed. It has been determined that the existing tank foundation is in good condition and will not need to be replaced.
- 5.) All land and permanent easements necessary to complete the projects is already owned by the Knott County Water & Sewer District. Temporary construction easements may need to be acquired.
- 6.) The KCWSD has applied for 75% funding from Rural Development and will fund the remaining cost with Coal Severance.

**RECOMMENDATIONS**

- 1.) All existing easements should be reviewed, copied, and kept in file throughout the construction of the project.
- 2.) Adjacent property owners shall be notified of the construction activities and any temporary construction easements necessary should be negotiated at this time.
- 3.) Develop a water service maintenance plan that allows the construction to be completed without disrupting water service to existing customers.

**Preliminary Engineering Report**

---

**APPENDIX 'A'**

---

**PSC Utility Inspection Report**

COMMONWEALTH OF KENTUCKY  
PUBLIC SERVICE COMMISSION

UTILITY INSPECTION REPORT

Report Date: 9/12/2007

Report Number: KnottCWSD-091107

---

BRIEF

**Inspector:** Joe Greenwell  
**Inspection Date:** 9/11/2007  
**Type of Inspection:** Follow-Up Inspection

**Type of Facility:** Purchaser and Distribution Facility  
**Name of Utility:** Knott County Water & Sewer District  
**Location of Facility:** Water Division, P.O. Box 884, Hindman, Kentucky 41822  
**Purpose of Inspection:** Inspection of utility facilities to verify actions taken to correct a deficiency.

**Applicable Regulations** KRS 278 and 807 KAR Chapter 5

---

INSPECTION

**Description of Utility:** Water treatment plant with a capacity of 140,000 gallons  
**Number of Customers:** 444  
**Area of Operation:** Knott County  
**Supply Source:** City of Hindman and 4 wells  
**Distribution Description:** Average daily consumption of 75,000 gallons with a total storage capacity of 216,000 gallons, 30 miles of distribution line (PVC, DI, and AC)  
**Workforce Summary:** 2 employees: 1 office; 1 field  
**Utility Reps in Insp:** Reva Campbell  
**Date of Last Inspection:** 6/20/2007  
**DTR from Last Insp:** 2  
**DTRs not Cleared:** 0

**Summary of items and facilities inspected:**

Records including, but not limited to, meter testing, reading, and history; flushing; service interruptions; complaints; facilities inspections and procedures; operation and maintenance manual; facilities maintenance; safety guidelines; a copy of a water shortage response plan; and the service area map, etc.; Alice Lloyd College Water Storage Facility (108,000 gal.) in Pippa Passes; Pippa Passes Water Storage Facility (108,000 gal.); and the bottom of the tank which has scum buildup and rusted screws.



**COMMONWEALTH OF KENTUCKY  
PUBLIC SERVICE COMMISSION**

**UTILITY INSPECTION REPORT**

Report Date: 9/12/2007

Report Number: KnottCWSD-091107

---

**FINDINGS**

- 1 The Alice Lloyd College and the Pippa Passes Water Storage Facilities appear to be in need of maintenance and refurbishing. The Pippa Passes Water Storage Facility has scum at the bottom of the tank and rusted screws. The Alice Lloyd College Water Storage Facility is showing a great deal of rust. This may indicate a failure to operate the utility's facilities in an adequate and safe manner. This may also indicate an ineffective inspection and maintenance program.

---

**RECOMMENDATIONS**

Knott County Water & Sewer District shall provide maintenance attention to the Alice Lloyd College and Pippa Passes Water Storage Facilities. The Pippa Passes Water Storage Facility has scum at the bottom of the tank and rusted screws. The Alice Lloyd College Water Storage Facility is showing a great deal of rust. The facilities shall be inspected, cleaned, and refurbished. In addition the district does not have any records of maintenance being performed on the Pippa Passes Water Storage Facility, and the Alice Lloyd College Water Facility was scheduled for inspection over 2 years ago, but the inspection has not yet been completed. This may indicate a failure to operate the utility's facilities in an adequate and safe manner. This may also indicate an ineffective inspection and maintenance program.

Knott County Water & Sewer District may be understaffed. The district may consider obtaining an opinion from the Kentucky Rural Water Association concerning this issue. The water system seems to be in a physically deteriorating condition that could possibly be due to lack of staffing among other things. The main concern is the reason this facility was allowed to reach its current condition. This may indicate a failure to operate the utility's facilities in an adequate and safe manner. This may also indicate an ineffective inspection and maintenance program. This concern will be cited at this time.

---

**ADDITIONAL INSPECTOR COMMENTS**

The district was given a copy of the water utility inspection quick reference, the water utility inspection checklist, the Public Service Commission's water loss monthly report, the water utility inspection procedures outline, the general outline for inspection plans, and the new edition of the laws affecting public utilities.

Knott County Water & Sewer District has begun construction of the new Carr Creek Water Treatment Plant which should be on line by fall of 2008.

Water loss for 2005 was 22 percent; water loss for 2006 was 18 percent. Knott County Water & Sewer District submitted a water loss prevention/leak detection plan and certain actions taken to curb water loss in their system. Since there is a clear decline in the water loss percentage, this will remain an ongoing deficiency that will not be cited at this time, unless the water loss percentages increase again. The district has a meter replacement program.

A follow-up inspection will be conducted within 6 months.

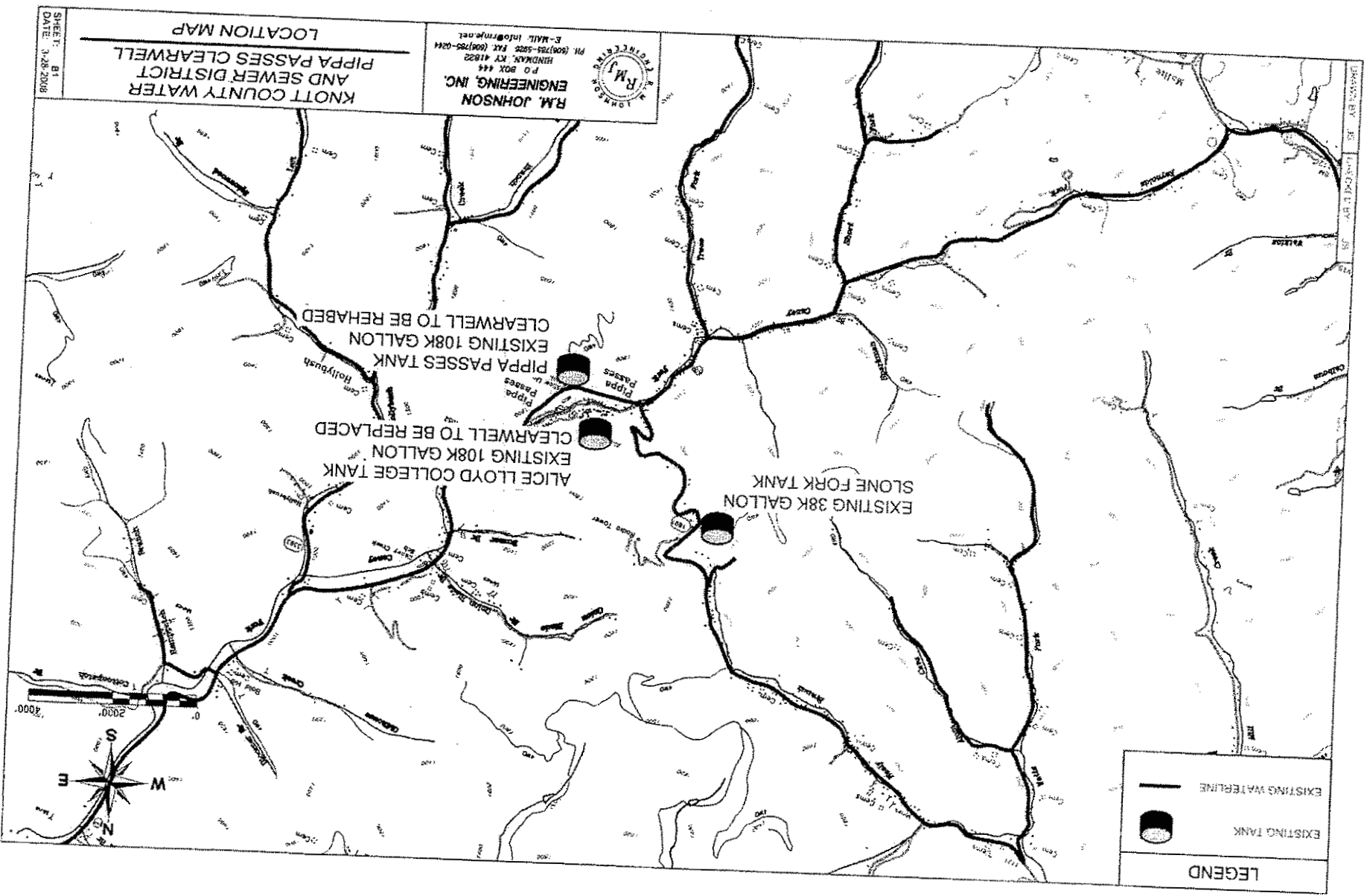
Preliminary Engineering Report

---

**APPENDIX 'B'**

---

**Project Map of Tanks & Service Areas**



KNOTT COUNTY WATER  
AND SEWER DISTRICT  
PIPPA PASSES CLEARWELL  
LOCATION MAP

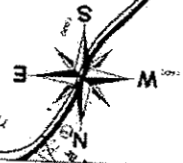
R.M. JOHNSON  
ENGINEERING, INC.  
P.O. BOX 444  
HINDMAN, KY 41022  
PH (606)785-5282 FAX (606)785-0244  
E-MAIL: info@rmjeng.com



**LEGEND**

EXISTING TANK

EXISTING WATERLINE

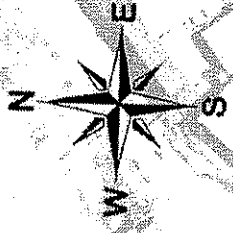


SHEET: B1  
DATE: 3/28/2008

PROPOSED REPLACEMENT  
OF EXISTING 100K GALLON CLEARWELL  
W/ 300K GALLON CLEARWELL

15FT OFFSET OF GRAVEL PLACEMENT

100 LF OF 12' GRAVEL  
ACCESS ROAD



ALICE LLOYD  
COLLEGE CAMPUS

KY RT 699

TO HINDMAN

TO WAYLAND

EXISTING 100K  
GALLON CLEARWELL



**R.M. JOHNSON  
ENGINEERING, INC.**  
P.O. BOX 444  
HINDMAN, KY 41822  
PH. (606)785-5926 FAX. (606)785-0244  
E-MAIL: info@rmje.net

**KNOTT COUNTY WATER  
AND SEWER DISTRICT  
PIPPA PASSES CLEARWELL**

**PROJECT SITE**

SHEET: B2  
DATE: 3-28-2008

DRAWN BY: JS  
CHECKED BY: JS



STEVEN L. BESHEAR  
GOVERNOR

GOVERNOR'S OFFICE FOR LOCAL DEVELOPMENT  
OFFICE OF THE GOVERNOR  
1024 CAPITAL CENTER DRIVE, SUITE 340  
FRANKFORT, KENTUCKY 40601-8204  
PHONE (502) 573-2382 FAX (502) 573-2939  
TOLL FREE (800) 346-5606  
www.kentucky.gov

February 13, 2008

Mr. Greg Pridemore  
Kentucky River ADD  
917 Perry Park Road  
Hazard, KY 41701

RE: Pippa Passes Water Storage Tank  
WX21119151  
SAI# KY20080130-0057  
CFDA# 10.770

Dear Mr. Pridemore:

The Kentucky State Clearinghouse, which has been officially designated as the Commonwealth's Single Point of Contact (SPOC) pursuant to Presidential Executive Order 12372, has completed its evaluation of your proposal. The clearinghouse review of this proposal indicates there are no identifiable conflicts with any state or local plan, goal, or objective. Therefore, the State Clearinghouse recommends this project be approved for assistance by the cognizant federal agency.

Although the primary function of the State Single Point of Contact is to coordinate the state and local evaluation of your proposal, the Kentucky State Clearinghouse also utilizes this process to apprise the applicant of statutory and regulatory requirements or other types of information which could prove to be useful in the event the project is approved for assistance. Information of this nature, if any, concerning this particular proposal will be attached to this correspondence.

You should now continue with the application process prescribed by the appropriate funding agency. This process may include a detailed review by state agencies that have authority over specific types of projects.

This letter signifies only that the project has been processed through the State Single Point of Contact. It is neither a commitment of funds from this agency or any other state or federal agency.

The results of this review are valid for one year from the date of this letter. Continuation or renewal applications must be submitted to the State Clearinghouse annually. An application not submitted to the funding agency, or not approved within one year after completion of this review, must be re-submitted to receive a valid intergovernmental review.

If you have any questions regarding this letter, please feel free to contact my office at 502-573-2382.

Sincerely,

  
Lee Nailey  
Kentucky State Clearinghouse

Attachments

Cc: Kentucky River ADD  
KIA

The Office of State Budget Director has made the following advisory comment pertaining to State Application Identifier Number KY200801300057

Endorsed by Vicki Gains 1/30/08

The Kentucky Housing Corporation has made the following advisory comment pertaining to State Application Identifier Number KY200801300057  
no comments

The Labor Cabinet has made the following advisory comment pertaining to State Application Identifier Number KY200801300057

Prevailing Wage Rates are applicable please contact the Kentucky Department of Labor at 502-564-3070 to obtain the proper rates

The Fish & Wildlife has made the following advisory comment pertaining to State Application Identifier Number KY200801300057

Based on the information provided, the Kentucky Department of Fish & Wildlife Resources has no comments concerning the proposed project.

The Transportation has made the following advisory comment pertaining to State Application Identifier Number KY200801300057

Damron (D12), Keith: This project should not affect State highway Right of Way.

The Health and Family Services has made the following advisory comment pertaining to State Application Identifier Number KY200801300057  
No Comment.

The Natural Resources has made the following advisory comment pertaining to State Application Identifier Number KY200801300057

This review was based upon the information that was provided by the applicant through the Clearinghouse for this project. An endorsement of this project does not satisfy, or imply, the acceptance or issuance of any permits, certifications or approvals that may be required from this agency under Kentucky Revised Statutes or Kentucky Administrative Regulations. Such endorsement means this agency has found no major concerns from the review of the proposed project as presented other than those stated as conditions or comments.

The proposed project is subject to Division of Water (DOW) jurisdiction because the following are or appear to be involved: water storage tank and appurtenances. Prior approval must be obtained from the DOW before construction can begin. The applicant must cite the State Application Identifier (SAI #KY200801300057) when submitting plans and specifications.

This project is consistent with the Knott County Water Management Plan. It is approved for water management planning. It is approved for water withdrawal by the Water Quantity Management Section of DOW. From the application data, DOW ascertains that a stream construction permit application will need to be submitted to our office for further review of this project.

The proposed project will construct a 300,000 gallon water storage tank, access road, and related appurtenances. It will replace the existing standpipe storage tank. This project will enhance the overall storage capacity for the Knott County Water District. It will also increase the available pressures in several key areas of Knott County. Completion of this project will provide improved water service to 150 households, 3 commercial entities, and 1 miscellaneous entity (school, church, etc.). There are no objections to the proposed project. However, final plans and specifications along with hydraulic analysis of the proposed project (including fill/drain cycles of the tank to justify adequate tank turn over must be submitted to the Division of Water's Drinking Water Branch by a registered professional engineer in Kentucky. The applicant must receive a written approval from the Division of Water prior to the beginning of the construction.

If the construction area disturbed is equal to or greater than 1 acre, the applicant will need to apply for a Kentucky Pollutant Discharge Elimination System (KPDES) storm water discharge permit.

Utility line projects that cross a stream will require a Section 404 permit from the US Army Corps of Engineers and a 401 Water Quality Certification from DOW.

The Housing, Building, Construction has made the following advisory comment pertaining to State Application Identifier Number KY200801300057

no comment

The Heritage Council has made the following advisory comment pertaining to State Application Identifier Number KY200801300057

The project will have no effect on any property listed in or eligible for listing in the National Register of Historic Places. Further, an archaeological survey will not be necessary. Therefore, we have no objection to the project.



STEVEN L. BESHEAR  
GOVERNOR



ROBERT D. VANCE  
SECRETARY

**ENVIRONMENTAL AND PUBLIC PROTECTION CABINET**

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WATER

14 REILLY ROAD

FRANKFORT, KENTUCKY 40601

[www.kentucky.gov](http://www.kentucky.gov)

May 20, 2008

Alice Ritchie, KCWSD Chair  
Knott Co Water District  
PO Box 884  
Hindman, KY 41822

RE: Knott Co Water District  
AI # 44215, APE20080002  
PWSID # 0600062-08-002  
Alice Lloyd College Tank Replacement &  
Pippa Passes Tank Rehab.  
Knott County, KY

Dear Ms. Ritchie:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of a 100,000 gallon steel ground storage tank to replace the current Alice Lloyd College Tank. Plans also include performing general maintenance on the 100,000 gallon Pippa Passes Tank including but not limited to adding Cathodic Sacrificial Protection. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit. For the maintenance of the Pippa Passes Tank the following requirements are applicable:

1. Paints and coatings shall meet NSF standard 61.
2. Paints and coatings shall be properly applied and cured.
3. Paints and coatings shall not transfer any substance to the water which will be toxic or cause tastes or odors (following curing).
4. If cathodic protection is utilized, competent technical personnel should design and install the protection and a maintenance contract should be provided.
5. Following completion of work on the tank and before being placed into service, the tank shall be thoroughly disinfected.
6. Disposal of heavily chlorinated water from the tank disinfection process shall be in accordance with the Kentucky EPPC Division of Water requirements.
7. Two or more successive sets of bacteriological samples, taken at 24-hour intervals, shall be taken and reported (using the most expedient method) to the Division of Water following disinfection.
8. Samples shall indicate microbiologically satisfactory water prior to placing the tank back into operation.

9. When the project is completed, the owner shall submit a written certification to the Division of Water that the above referenced maintenance and modification has been completed in accordance with the approved specifications. Such certification shall be signed by a licensed professional engineer.

This approval has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this approval does not relieve the applicant from the responsibility of obtaining any other approvals, permits or licenses required by this Cabinet and other state, federal and local agencies. Furthermore, this permit does not address the authority of the permittee to provide service.

Unless the above referenced project commences within one year from the date of this approval letter, Knott County Water and Sewer District shall request an official extension from the Division of Water prior to the first anniversary of this approval letter, or resubmit the original specifications for a new comprehensive review. If you have any questions concerning this project, please contact Mr. Terry Humphries at 502-564-8158 extension 518.

Sincerely,



for Donna S. Marlin, Manager  
Drinking Water Branch  
Division of Water

MR:TH

Enclosures

C: RM Johnson Engineering Inc  
Knott County Health Department  
Public Service Commission

## Distribution-Major Construction

Knott Co Water District  
Subject Item Inventory

Activity ID No.: APE20080002

**Subject Item Inventory:**

ID	Designation	Description
AIO044215		
STOR8	Ground Storage Tank	100,000 Gallon Steel Ground Storage Tank

**Subject Item Groups:**

ID	Description	Components
GACT9	100,000 Gallon Steel Ground Storage Tank	STOR8 100,000 Gallon Steel Ground Storage Tank

**KEY**

ACTV = Activity  
AREA = Area  
EQPT = Equipment  
PERS = Personnel  
STOR = Storage  
TRMT = Treatment

AIOO = Agency Interest  
COMB = Combustion  
MNPT = Monitoring Point  
PORT = Transport  
STRC = Structure

**Distribution-Major Construction**  
 Knott Co Water District  
 Facility Requirements

Activity ID No.: APE20080002

**GACT9 (ALC Tank Replacement) 100,000 Gallon Steel Ground Storage Tank:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for new storage structures. With at least 1 sample taken at least 24 hours after the first construction complete sample(s), take 2 or more samples from the yard hydrant, the outlet piping from the storage structure, or a sample tap directly connected to the storage structure. Sample bottles shall be clearly identified as "special" construction tests. [Recommended Standards for Water Works 7.0.18, 401 KAR 8:150 Section 4] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

**Submittal/Action Requirements:**

**Coliform:**

Condition No.	Condition
S-1	Coliform For new construction projects, the distribution system, using the most expedient method, shall submit Coliform test results to the Cabinet. Due immediately following disinfection and flushing. [401 KAR 8:150 Section 4(2)]

**Condition**

Condition No.	Condition
S-2	For proposed changes to the approved plan, submit information to the Cabinet for approval. Changes to the approved plan shall not be implemented without the prior written approval of the Cabinet. [401 KAR 8:100 Section 1(8)]
S-3	The person who presented the plans shall submit the professional engineer's certification: Due when construction is complete to the Division of Water. The certification shall be signed by a registered professional engineer and state that the water project has been constructed and tested in accordance with the approved plans, specifications, and requirements. [401 KAR 8:100 Section 1(8)]

**Distribution-Major Construction**  
 Knott Co Water District  
 Facility Requirements  
 Activity ID No.: APE20080002

GACT9 (continued):

**Narrative Requirements:**  
**Additional Limitations:**

Condition No.	Condition
T-1	Additional Limitations: Chlorinated water resulting from disinfection of project components shall be disposed in a manner which will not violate 401 KAR 5:031. [401 KAR 8:020 Section 2(20)]

T-2	This project has been permitted under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the applicant from the responsibility of obtaining any other approvals, permits or licenses required by this Cabinet and other state, federal and local agencies. Further, this permit does not address the authority of the permittee to provide service to the area to be served. [401 KAR 8:100 Section 1(7)]
T-3	Unless construction of this project is begun within 1 year from the issuance date of this permit, the permit shall expire. If requested prior to the permit expiration, an official extension from the Division of Water may be granted. If this permit expires, the original plans and specifications may be resubmitted for a new comprehensive review. If you have any questions concerning this project, please contact the Drinking Water Branch at 502/564-3410. [401 KAR 8:100 Section 1(9)]
T-4	During construction, a set of approved plans and specification shall be available at the job site at all times. All work shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 1(7)(a)]

**Distribution-Major Construction**  
 Knott Co Water District  
 Facility Requirements

Activity ID No.: APE20080002

**STOR8 (Ground Storage Tank) 100,000 Gallon Steel Ground Storage Tank:**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1	Depth	High and low level Depth $\geq$ 30 ft apart should not be allowed in storage structures providing pressure to a distribution system. [Recommended Standards for Water Works 7.3.2] This requirement is applicable during the following months: All Year. Statistical basis: Maximum.
L-2	Depth	Water Depth $\geq$ 50 percent of the total water depth should be above grade. [Recommended Standards for Water Works 7.0.2.b] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-3	Distance	Sewers, drains, standing water and similar sources of possible contamination shall be a Distance $\geq$ 50 ft from ground-level storage structures. The only exception allowed is for gravity sewers. Gravity sewers are allowed within 50 ft of ground-level storage structures only if they are a) greater than 20 ft from all ground-level storage structures and b) constructed of water main pipe pressure tested in place to 50 psi without leakage. [Recommended Standards for Water Works 7.0.2.b] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-4	Distance	To prevent excessive erosion of storage structure foundations, the overflow and main drain shall either a) discharge to concrete or other stable surfaces (splash pads) which extend a Distance $\geq$ 10 ft away from the base of the storage structure or b) discharge directly into a crushed stone pit that is at least 2' x 2' x 2' which is a Distance $\geq$ 10 ft away from the base of the storage structure. [401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-5	Height	Tanks shall have an overflow which is a) brought down to a Height $\geq$ 12 and $\leq$ 24 in above the ground surface, b) of sufficient diameter to permit waste of water in excess of the filling rate, c) open downward, d) screened with twenty-four mesh noncorrodible screen installed within the pipe at a location least susceptible to damage by vandalism, and e) located on the outside of the tank so that any discharge is visible. [Recommended Standards for Water Works 7.0.7] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.

**Distribution-Major Construction**  
 Knott Co Water District  
 Facility Requirements  
 Activity ID No.: APE20080002

**STOR8 (continued):**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-6	Height	Tanks shall have manholes that are a) framed a Height $\geq 4$ in above the surface of the roof at the opening and b) fitted with a solid watertight cover which overlaps the framed opening and extends down around the frame at least 2 inches. Manholes should be hinged at one side and shall have a locking device. [Recommended Standards for Water Works 7.0.8] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
<b>Narrative Requirements:</b>		
<b>Additional Limitations:</b>		

T-1	Additional Limitations:	The materials and designs used for storage structures shall provide stability and durability as well as protection for the quality of the stored water. Steel structures in this permit. [Recommended Standards for Water Works 7.0]
T-2	Additional Limitations:	The safety of employees must be considered in the design of any storage structure. The design of storage structures shall a) meet or exceed the minimum requirements of pertinent safety laws and regulations in the areas where the structures are constructed, b) include ladders, ladder guards and balcony railings (where applicable), c) locate entrance hatches in safe places, and d) consider confined space entry requirements. [Recommended Standards for Water Works 7.0.12]
T-3	Additional Limitations:	Storage structures shall be designed with reasonably convenient access to the interior for cleaning and maintenance. Where space permits, at least 2 manholes shall be provided above the waterline at each water compartment. [Recommended Standards for Water Works 7.0.8]
T-4	Additional Limitations:	Fencing, locks on access manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage. [Recommended Standards for Water Works 7.0.4]

**STOR8 (continued):**

**Narrative Requirements:**

**Additional Limitations:**

Condition	No.	Condition
-----------	-----	-----------

T-5 Additional Limitations: All storage structures and their appurtenances, especially the riser pipes, overflows, and vents, shall be designed to prevent freezing. [Recommended Standards for Water Works 7.0.13]

T-6 Additional Limitations: Tanks shall be constructed with no openings except properly constructed vents, manholes, overflows, risers, drains, pump mountings, control ports, and piping for inflow and outflow.  
 For steel tanks, any pipes running through the roof or sidewall must be welded or properly gasketed.  
 For concrete tanks, any pipes running through the roof or sidewall shall be connected to standard wall castings which were poured in place during the forming of the concrete and which should have seepage rings imbedded in the concrete. [Recommended Standards for Water Works 7.0.10]

T-7 Additional Limitations: All finished water storage structures shall have suitable watertight roofs and sidewalls which exclude birds, animals, insects, and excessive dust. [Recommended Standards for Water Works 7.0.3, Recommended Standards for Water Works 7.0.10]

T-8 Additional Limitations: The roof of each storage structure shall be well drained. Downspout pipes shall not enter or pass through storage structures. Parapets or similar structures which would tend to hold water and snow on a storage structure roof shall not be approved unless adequate waterproofing and drainage are provided. [Recommended Standards for Water Works 7.0.11]

T-9 Additional Limitations: Storage structures shall be designed so they can be isolated from the distribution system and drained for cleaning or maintenance without necessitating loss of pressure in the distribution system. [Recommended Standards for Water Works 7.3.2, Recommended Standards for Water Works 7.0.5]

T-10 Additional Limitations: Storage structure drains shall discharge to the ground surface at a drainage structure inlet or splash plate. [Recommended Standards for Water Works 7.3.2, Recommended Standards for Water Works 7.0.7]

T-11 Additional Limitations: No drain on a storage structure may have a direct connection to a sewer or storm drain. [Recommended Standards for Water Works 7.0.5, Recommended Standards for Water Works 7.0.7, Recommended Standards for Water Works 7.3.2]



**Distribution-Major Construction**  
 Knott Co Water District  
 Facility Requirements  
 Activity ID No.: APE20080002

**STOR8 (continued):**

**Narrative Requirements:**

**Additional Limitations:**

Condition No.	Condition
T-12	<p>Additional Limitations:                      Main drains from storage structures shall have a twenty-four mesh noncorrodible screen installed within the drain pipe at a location least susceptible to damage by vandalism. [401 KAR 8:100 Section 1(7)]</p>
T-13	<p>Additional Limitations:                      Storage structures shall be designed to facilitate turn over of water. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.0.6]</p>
T-14	<p>Additional Limitations:                      Ground level storage tanks and standpipes shall be equipped with separate inlet/outlet pipes installed on opposite sides of the tank. A check valve shall be installed in the outlet pipe to insure turnover of the water. The inlet pipe                      a) shall be installed near the overflow elevation and                      b) shall not interfere with the overflow discharge. [401 KAR 8:100 Section 1(7)]</p>
T-15	<p>Additional Limitations:                      Storage structures shall have sufficient capacity, as determined from engineering studies, to meet domestic demands. Additionally, if fire protection is provided, capacity shall also be sufficient to meet fire flow demands. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.0.1]</p>
T-16	<p>Additional Limitations:                      The bottom of the structure shall be above                      a) the maximum flood level and                      b) the groundwater level. [Recommended Standards for Water Works 7.0.2]</p>
T-17	<p>Additional Limitations:                      Storage structure discharge pipes shall be located in a manner that will prevent the flow of sediment into the distribution system. Additionally, removable silt stops should be provided. [Recommended Standards for Water Works 7.0.15]</p>
T-18	<p>Additional Limitations:                      Appropriate sampling tap(s) shall be provided to facilitate collection of water samples for both bacteriologic and chemical analyses. [Recommended Standards for Water Works 7.0.19]</p>

**Distribution-Major Construction**  
 Knott Co Water District  
 Facility Requirements  
 Activity ID No.: APE20080002

**STOR8 (continued):**

**Narrative Requirements:**

**Additional Limitations:**

Condition No.	Condition
---------------	-----------

T-19	<p>Additional Limitations: Storage structures shall be vented. Overflows shall not be considered as vents. Open construction between the sidewall and roof is not permitted. Vents shall</p> <p>a) prevent the entrance of rainwater,                      b) exclude birds and animals, and                      c) exclude insects and dust (as much as compatible with effective venting).                      Vents may use four-mesh noncorrodible screen. [Recommended Standards for Water Works 7.0.9]</p> <p>Additional Limitations: Adequate controls shall be provided to maintain levels in storage structures. The level controls shall be acceptable to the Division of Water. Level indicating devices should be provided at a central location. Overflow and low-level warnings or alarms should be located at places in the community where they will be under responsible surveillance 24 hrs a day. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.3.3]</p>
T-20	<p>Additional Limitations: If storage structures have a catwalk over the water, the catwalk floor shall be solid with raised edges so that shoe scrapings and dirt will not fall into the water. [Recommended Standards for Water Works 7.0.14]</p>
T-21	<p>Additional Limitations: The area around the storage structure shall be graded in a manner that will prevent surface water from standing within 50 ft of the storage structure. [Recommended Standards for Water Works 7.0.16]</p>
T-22	<p>Additional Limitations: Proper protection shall be given to metal surfaces by</p> <p>a) paints or other protective coatings and/or                      b) cathodic protective devices. [Recommended Standards for Water Works 7.0.17]</p>
T-23	<p>Additional Limitations: If cathodic protection is utilized,                      a) competent technical personnel should design and install the protection and                      b) a maintenance contract should be provided. [Recommended Standards for Water Works 7.0.17]</p>

## Distribution-Major Construction

Knott Co Water District  
Facility Requirements

Activity ID No.: APE20080002

Page 8 of 9

### STOR8 (continued):

#### Narrative Requirements:

##### Additional Limitations:

---

#### Condition

#### No. Condition

---

- T-25 Additional Limitations:  
If the interior of the storage structure is coated or lined, the coating or lining shall be of a type approved by the Division of Water for use in contact with potable water. [401 KAR 8:020 Section 2(19)]
- T-26 Additional Limitations:  
Paints and coatings  
a) shall meet NSF standard 61,  
b) shall be acceptable to the Division of Water,  
c) shall be properly applied and cured, and  
d) shall not transfer any substance to the water which will be toxic or cause tastes or odors (following curing).  
Wax coatings shall not be used in any storage structure and must be completely removed before using other paints or coatings in an existing storage structure. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.0.17]
- T-27 Additional Limitations:  
New water storage structures shall be thoroughly disinfected (in accordance with AWWA Standard C652) upon completion of construction and before being placed into service. To disinfect new storage structures  
1) remove all scaffolding, planks, tools, rags, and other items that are not part of the structural or operational facilities of the storage structure,  
2) clean thoroughly by sweeping, scrubbing, using high-pressure water jets, or some equivalently effective means, and  
3) use chlorine or chlorine compounds as subsequently described.  
Finalize disinfection by  
a) chlorination method 1, described in detail at AWWA Standard C652 Section 4.3.1,  
b) chlorination method 2, described in detail at AWWA Standard C652 Section 4.3.2, or  
c) chlorination method 3, described in detail at AWWA Standard C652 Section 4.3.3.  
See the following conditions for abbreviated descriptions of the methods.  
Following the finalization of disinfection, place storage structures into service if, and only if, Coliform monitoring applicable to the storage structure does not show the presence of Coliform.  
If Coliform is detected, flush the tank and repeat Coliform monitoring. If Coliform is still detected, repeat disinfection and flushing as if the tank has never been disinfected. Continue the described process until monitoring does not show the presence of Coliform. [Recommended Standards for Water Works 7.0.18]

## Distribution-Major Construction

Knott Co Water District  
Facility Requirements

Activity ID No.: APE20080002

Page 9 of 9

### STOR8 (continued):

#### Narrative Requirements:

---

Condition No.	Condition
T-28	If applicable, chlorination method 1 generally requires a) filling a storage structure to the overflow level with water providing a free chlorine Residual Disinfection $\geq 10$ ppm and b) i) completely draining the storage facility and refilling or b) ii) otherwise reducing (in accordance with method 1) the free chlorine residual to a level appropriate for distribution. [Recommended Standards for Water Works 7.0.18]
T-29	If applicable, chlorination method 2 generally requires a) scrubbing or spraying the water-contact surfaces of a storage structure with a water solution having an available chlorine concentration = 200 ppm and b) purging of the strong chlorine solution and filling to the overflow level. [Recommended Standards for Water Works 7.0.18]
T-30	If applicable, chlorination method 3 generally requires a) filling a storage structure to approximately 5% of the total storage volume with water having an available chlorine concentration of 50 ppm, b) continued filling of the storage structure to the overflow level with normal potable water, and c) purging the storage structure so that various disinfection by-products do not reach water consumers. [Recommended Standards for Water Works 7.0.18, 401 KAR 8:100 Section 1(7)]