COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Application of Troublesome Creek	)	
Environmental Authority, Inc.	)	
a Public Non-Profit	)	
Corporation for	)	**Case No.** 2010-00017
Certificate of Convenience	)	
and Necessity, to Construct Facility;	)	
to Set Initial Rates;	)	
to Incur Indebtedness	)	
and Authority to Operate	)	

PETITION

MAY IT PLEASE THE COMMISSION, Troublesome Creek Environmental Authority, Inc. (hereinafter, TEA), by and through counsel, petitions the Commission for an order authorizing the operation of a utility to provide waste water services to the citizens who live within the Troublesome Creek watershed; for authority to construct facilities; for authority setting initial rates; and for authority to incur indebtedness and for authority to operate.

TEA files this Petition in accordance with Commission regulations promulgated under KRS Chapter 278 et seq and KAR Chapter 807 et seq.

Your Petitioner states that time is of the essence in that, besides the pressing need of the citizens it seeks to serve, a major source of TEA funding via American Recovery Renewal Act (ARRA) requiring a construction start of February 10, 2010.

I. PRIORITY

In recognition of this time sensitive need, the Petitioner would request that the PSC

consider such requests on a separate prioritized basis. In other words, to review and complete certain requests in the following order before moving on to the next one.

First, the Petitioner would move for a Certificate of Convenience and Necessity to Construct a Facility and Authority to Operate.

Second, the Petitioner would then move for consideration to set initial rates along with authority to incur indebtedness.

II. BACKGROUND

The following information is provided pursuant to 807 KAR 5:001 §8:

1. The TEA address is: c/o KRADD, 917 Perry Park Road, Hazard, Kentucky 41701. The TEA management consists of an Executive Board only. The Board is made up of the following members: Lewis H. Warrix, Chairman; Members: Don Gibson, Jim Childers, Charles Colwell, and Tim Spencer. Information about TEA existence and mission statement is attached as **Exhibit 1**.

2. TEA exists as a public corporation organized under KRS 273 et seq. TEA was formed on August 11, 2006. TEA has also qualified as a §501 (C) (3) non-profit agency under Internal Revenue Service. The Agent for Process is Paul E. Hall. A certified copy of the Articles of Incorporation and Certificate of Good Standing Existence is attached as **Exhibit 2.**

3. (A) "THE NEED".

TEA's public goal is to establish waste water treatment options for all the citizens who live within the watershed of Troublesome Creek. TEA intends to provide whatever is most site-appropriate and cost effective treatment to deal with waste water. IN the Ball Creek area, the most appropriate means has been reviewed and determined to be a centralized waste water

treatment plant. TEA believes that the target population is approximately 15, 000 people/homes. Currently, none have their waste water treated and instead rely on septic tank systems or straight pipes.

The EPA estimates that thirty percent (30%) of all soil based treatment systems are either failed or failing. When soil systems fail, the sewage is not adequately treated and may percolate to the surface and even migrate to streams, thereby causing a health hazard. Sewage is the number one pollutant of the streams of the Commonwealth.

TEA was born out of the realization that large swatches of area outside of urban centers in this watershed have no waste water treatment options and the soils are typically not well suited for construction of septic systems using lateral lines. The result of which lead many, out of desperation, to straight piping waste water directly in the Troublesome Creek.

The impetus for TEA became a reality with the availability of severance tax revenues and the encouragement by state government for counties to form interlocal agreements to combat problems such as waste water treatment, which was so pervasive that no one county could adequately deal with it.

From this backdrop Knott, Perry and Breathitt Fiscal Courts came together and formed TEA through an Interlocal Cooperation Agreement. See attached as **Exhibit 3**.

In selecting mechanical treatment options from among a number of alternatives, TEA proposes a series of three sewer treatment plants: the first in Knott County; the second in Perry County and finally the third in Breathitt County. While land acquisitions are being investigated in Perry and Breathitt Counties, the Knott County site has been acquired by TEA from Consol of Kentucky. See Deed and Easement at **Exhibit 4.**

A public meeting occurred on December 1, 2009 where only supporters appeared with no one voicing an opposition. See minutes at **Exhibit 5**.

In conclusion, TEA can demonstrate there is a current demand and need for the service sought to be rendered. The service area is well defined by the geographical dimensions of the watershed; there are no other waste water treatment plants on the watershed. The soils are ill-suited for other type of disposal and the presence of polluting straight pipes are pervasive.

(B) "RESPONSE FOR FUTURE NEED":

This proposed project also acts as a stimulus of future development and need within the watershed. Enclosed is a commitment letter from Western Pocahontas Properties, one of the largest land holders in the area, indicating concrete plans for Chestnut Mountain Development, a mixed commercial/residential development with 332 single and multi-family residential units **(See Exhibit 6).**

The presence of reliable and safe waste water treatment infrastructure generates additional adjacent development sought for and supported by the community (see Christon letter for Multi-Cinema - **Exhibit 7**; Hutchinson letter for McDonalds - **Exhibit 8**. None of which will occur without the in-place availability of an adequate waste water treatment.

III. PETITION FOR CERTIFICATE OF CONVENIENCE AND NECESSITY FOR CONSTRUCTION WASTE WATER TREATMENT PLANT AND COLLECTION SYSTEM AND TO BE PROVIDER OF UTILITY SERVICES (KRS 278.020)

The Petitioner hereby submits the following data in support of this portion of the Petition as required by 807 KAR 5:01 §9 (2).

4. The public convenience or necessity has been adequately demonstrated by Article I § 3 of

this Petition. KAR 5:01 §9 (2)(a).

5. Copies of permits from proper public authority for proposed new construction attached as **Exhibit 9.**

(A) The Sewer Line Component:

6. A full description of the proposed location route or routes of the new construction including a description of the manner in which same will be constructed; See **Exhibit 10.**

7. TEA will not compete with any other public or private utility entity or persons other than local septic tank installers or vendors. There are no similar facilities or services owned by others located within the watershed. KAR 5:01 §9 (2)(C).

8. TEA has already undertaken easement acquisitions for pipeline right of way. A sample copy of the easement form is attached as **Exhibit 11**.

9. Three (3) maps to suitable scale (preferably not more than two (2) miles per inch) showing the location or route of the proposed new construction, KAR 5:01 §9 (2)(d), attached as **Exhibit 10.**

(B) The Wastewater Treatment Facility:

10. A full description of the new construction including a description of the manner in which same will be constructed; See **Exhibit 10.**

11. TEA does not believe that it will compete with any other public utility corporation or persons other than local septic tank vendors and installers. There are no like owned facilities owned by others located within the watershed. KAR 5:01 §9 (2) (C).

12. Three (3) maps to suitable scale (preferably not more than two (2) miles per inch) showing the location of the proposed new plant construction, KAR 5:01 §9 (2)(d), is attached as **Exhibit 10**.

13. The manner in detail in which it is proposed to finance the new construction. KAR 5:01 §9 (2)(e) is explained by **Exhibit 12**.

14. A description of the waste water treatment plant facility is attached hereto as **Exhibit 10** and the estimated construction cost is attached hereto as **Exhibit 13**.

15. An estimated cost of operation after the proposed facilities are completed. KAR 5:01 §9 (2)(f) **See Exhibit 14.**

16. Once constructed, TEA has contracted with Utility Management Group, LLC. to operate and provide technical advise for the waste water treatment facility. The contract to operate is attached as **Exhibit 15**. The professional resume of UMG is attached as **Exhibit 16**.

17. TEA has contracted R.M. Johnson Engineering to be project engineer. The qualification of R.M. Johnson is attached as **Exhibit 17**. The principle owner of R.M. Johnson Engineering is Ron Johnson, his professional resume is attached as **Exhibit 17**. The Project Engineer is Steve Harris, his professional resume is attached hereto as **Exhibit 17.**

18. All other information necessary to afford the Commission a complete understanding of the situation. KAR 5:01 §9 (2)(g) would include the strict timeline to construct as shown by **Exhibit 18**.

IV. PETITION FOR ASSISTANCE IN SETTING INITIAL RATES USING APPROPRIATE PORTIONS OF 807 KAR 5:001 § 10 (6) AS TEMPLATE:

19. A copy of the Articles of Incorporation and as amended are attached hereto as **Exhibit 2**.

20. Copies of form contracts expected to be used for sewer services consumption and operations are attached as **Exhibit 19**, which includes Customer Service Request Form; Sewer User Agreement for Pressure Sewer System; User Agreement Gravity Sewer System and Sewer User

for Alternative Sewer System.

21. Initial rates are being proposed to meet projected first year operating cost and are included in **Exhibit 20**.

22. No testimony is being filed and there are no customer notices.

23. A schedule of the effect of rates for proposed customers is not applicable because there are no customers at this time. Projections using current customer base for first year is attached as **Exhibit 20**.

24. Because initial rates are being proposed, a billing analysis is not applicable.

25. A summary of revenue requirements has not been prepared in that no debt service is anticipated in the initial project.

26. There is no reconciliation of rate base and capital. There is no statement estimating the effect of the initial rates on revenue of utility except for original operative budget at **Exhibit 14**.

27. There is no current chart of accounts.

28. There is no auditor's report as the company is not in operation, but TEA does submit U.S. income tax forms as **Exhibit 21**.

29. TEA is an instrumentality of the three-county consortium and as such there is no indirect ownership.

30. There is no FERC regulation or reports applicable to TEA or this report.

31. There is no depreciation study as the company has no depreciable assets at this time.

32. Software used is Word, Excel and Quick Books. TEA has not consulted with any rate base models.

33. There is no prospectus or other SEC information applicable to TEA.

34. There are no shareholders reports applicable to TEA.

35. There are no monthly managerial reports as TEA has not begun operations.

36. There are no affiliate charges or allocations applicable to TEA or this report.

37. Tariffs are stated in **Exhibit 22**.

38. Other information required under these regulations is not applicable to this Petition because the Petitioner is not operating and initial rates have not been approved or charged.

V. PETITION FOR PERMITTING INCURRING INDEBTEDNESS PURSUANT 807 KAR 5:001 § 11 and 807 KAR 5:001 § 6

39. A general description of the property is contained in **Exhibit 4**. The original cost is the face amount on the deed $30,000.00.

40. Financing and sources of funds for the project is explained in **Exhibit 12.** TEA has a contract to repay $500,000 borrowed from KRWA which will be repaid upon receipt of permanent financing as explained in **Exhibit 12**.

41. The property to be constructed is described in **Exhibit 4**.

42. There are no trust deeds or mortgages. TEA purchased the Knott County real estate from funds on hand derived from the KRWA interim loan.

43. Other property sites for Perry and Breathitt Counties are being scouted at this time but no definitive decision has been made as to location and purchase. TEA seeks no application for indebtedness as these projects at this time.

44. There is no common or preferred stock. No stock has been or will be issued as TEA is a non-profit public corporation.

45. There are no bonds issued by TEA for this project.

46. TEA has no external debt except the $500,000.00 obligation of interim financing provided by

KRWA. See **Exhibit 12** for explanation.

47. No dividends have been paid or accrued.

48. TEA submits a pro forma income statement attached as **Exhibit 23**.

49. Conditions of approved funding source (ARRA) require that the start date for construction be February 10, 2010.

50. In-service date is February 2011.

51. The total estimated cost of construction to complete is $3,245,000.00. The maps illustrating the collection system and the treatment plant site along with specifications has been created at **Exhibit 10** and **Exhibit 13.**

52. Amount of CWIP is $0.00.

53. No plant retirements are involved in this project.

54. No salvage value is involved because there are no retirements.

55. Pro forma adjustments are shown in the income statement as well as various exhibits detailing projected costs of operations. There are no separate budget amounts that differ from the pro forma projections. Pro forma operating budget is shown in **Exhibit 23**.

56. There is no customer notice because no customers are currently being served. Notice of rates will be provided to each customer as service is initiated. However, rates were discussed at the public meeting. See **Exhibit 5**.

VI. REQUEST FOR WAIVER:

57. TEA request that it be granted a deviation under 807 KAR 5:004(14), if necessary to accommodate any situation where inflexible compliance with a regulation would be futile, impracticable, onerous or which would hinder the review of the petition.

VII. CONCLUSION:

For these reasons, Troublesome Creek Environmental Authority request that it first be granted a Certificate of Convenience and Necessity to Construct Facility, then later, for assistance to set initial rates and incur indebtedness.

SUBMITTED BY:

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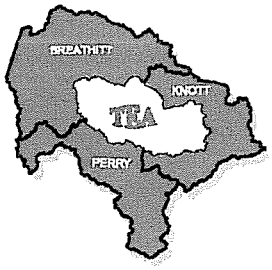
ATTORNEY FOR TROUBLESOME CREEK
ENVIRONMENTAL AUTHORITY, INC.



TroublesomeCreek
ENVIRONMENTAL AUTHORITY

c/o KRADD
917 Perry Park Road, Hazard, Kentucky 41701
Phone: (606) 436-3158 Fax: (606) 436-2144

History of Troublesome Creek Environmental Authority

The Authority was formed by an interlocal agreement of Knott, Perry and Breathitt Counties in late 2006. The focus of the Authority is to assess, correct and sustain the water quality of Troublesome Creek, a tributary of the Kentucky River. The Troublesome Creek Watershed encompasses 250 square miles and is home to over 14,000 residents, five public schools and two healthcare facilities. Troublesome is designated as an impaired stream and is listed on the 303D list of degraded waterways.

We are a 501 (c) 3 non-profit organization who is governed by a board of five directors. Each county has one representative; the board also has one member from the Kentucky Coal Association and one local business entrepreneur.

Mission Statement

To improve the water quality in the Kentucky River by implementing a program to address all needed remedial measures in the Troublesome Creek Water Shed.

Our Objective

The Authority, in collaboration with the mining industry, local governments and community based groups, seeks to employ a holistic, comprehensive approach to wetlands and stream loss mitigation as envisioned in the draft rule promulgated jointly by the EPA and the Corps in March, 2006. Specifically, the Authority seeks to construct, own and manage site-appropriate wastewater technology, via use of both on-site and centralized treatment systems to address the prevalence of failed septic systems and 'straight-pipe' use that characterizes much of the stream reach of Troublesome Creek and many other tributaries of the Kentucky River.

This project also compliments the goals of Section 404 of the Clean Water Act by providing a no net loss solution. Sewage pollution is the major causation of the Creek's water quality impairment. From the outset, in both design and construction, each

proposed activity will include work method specifications and be accompanied by complimentary work elements that address and correct pre-law and even pre-mining effects on the Creek. Correcting or eliminating earthen fills, "bank straightenings", invasive headwalls of roadway bridges, old sedimentation ponds and other actions that have proven detrimental to the Creek's water quality, and by consequence, its aquatic life, flora and fauna, will become specific construction work scope elements focused on improving water quality of the Creek. Collectively, these restoration efforts and the elimination of sewage pollution will bring about the re-generation of a vibrant habitat for fish and wildlife, reduce the impacts of seasonal flooding and again allow safe recreational use throughout the Troublesome Creek watershed.

COMMONWEALTH OF KENTUCKY

Trey Grayson
Secretary of State

Certificate

I, Trey Grayson, Secretary of State for the Commonwealth of Kentucky, do hereby certify that the foregoing writing has been carefully compared by me with the original thereof, now in my official custody as Secretary of State and remaining on file in my office, and found to be a true and correct copy of

ARTICLES OF INCORPORATION OF

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC. FILED AUGUST 11, 2006.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 23rd day of December, 2009.

COMMONWEALTH OF KENTUCKY
OFFICE OF SECRETARY OF STATE

Trey Grayson
Secretary of State
Commonwealth of Kentucky
mmullins/0644756 - Certificate ID: 90799

Commonwealth of Kentucky
Trey Grayson, Secretary of State

12/23/2009

Division of Corporations
Business Filings
P. O. Box 718
Frankfort, KY 40602
(502) 564-3490
http://www.sos.ky.gov

Certificate of Existence

Authentication Number: 90798
Visit http://apps.sos.ky.gov/business/obdb/certvalidate.aspx to authenticate this certificate.

I, Trey Grayson, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records of the Office of the Secretary of State,

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

is a nonprofit corporation duly incorporated and existing under KRS Chapter 273, whose date of incorporation is August 11, 2006 and whose period of duration is perpetual.

I further certify that all fees and penalties owed to the Secretary of state have been paid; that articles of dissolution have not been filed; and that the most recent annual report required by KRS 273.3671 has been delivered to the Secretary of State.

IN WITNESS THEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 23rd day of December, 2009.

COMMONWEALTH OF KENTUCKY
OFFICE OF SECRETARY OF STATE

Trey Grayson
Secretary of State
Commonwealth of Kentucky
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Trey Grayson
Secretary of State
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ARTICLES OF INCORPORATION OF TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned Incorporators, as the Judge Executives of Breathitt County, Knott County and Perry County, (the "Counties") Kentucky, respectively, do hereby associate to form a corporation for public, municipal, civic, and governmental purposes pursuant to the provisions of Chapter sections 273.161 to 273.390, inclusive, 58.180 and 65.210 to 65.300, inclusive, of the Kentucky Revised Statutes ("KRS"), and do declare and certify as follows:

Article I

The name of the corporation shall be "Troublesome Creek Environmental Authority, Inc." (the "Authority"). The Authority shall be at all times a nonprofit, no-stock public corporation pursuant to the provisions of KRS 273.161 to 273.390, inclusive, and KRS 58.180 for the performance of public, municipal, civic and governmental purposes pursuant to Kentucky law. The Authority shall be an agency, instrumentality and constituted authority of the Counties created and organized pursuant to, inter alia, KRS 58.180 and an Interlocal Cooperation Agreement entered into by the Counties under authority of KRS 65.210 to 65.300, inclusive.

Article II

The duration of the Authority shall be perpetual. The Authority may be dissolved at any time by joint action of the Counties, acting by and through their respective legislative bodies; provided that, if at the time of such dissolution there is outstanding any indebtedness or obligations of the Authority, such indebtedness or obligations shall be properly discharged or proper provision there for shall be made by the Authority. If the Authority is dissolved, title to all of its properties and assets (after provision has first been made for the payment and satisfaction

of any indebtedness and liabilities and expenses incident thereto) shall vest in the Counties, automatically and without any necessity for formal conveyance.

Article III

The purpose for which the Authority is organized is exclusively to assist and cooperate with, and to act on behalf of, at the direction of and as the agency, instrumentality and constituted authority of the Counties in effecting and maintaining high water quality in their shared resource, Troublesome Creek. The principal means to achieve this goal shall be the planning, development, acquisition, construction, installation operation, management, financing and refinancing of both centralized wastewater collection and treatment facilities and individual on site treatment facilities for and on behalf of, and as a joint and cooperative undertaking of the Counties within the drainage area of Troublesome Creek, pursuant to the provisions of Kentucky law and thus accomplish public and municipal purposes of the Counties. As used herein the terms 'wastewater' and 'sewer' are synonymous and 'wastewater collection and treatment facilities' means and includes any and all activities related to the planning, development, ownership, operation, maintenance and management of municipal or public sewer facilities to be owned by the Authority along and serving Troublesome Creek and its tributaries. The term 'facilities' includes but is not limited to centralized treatment plants, pumping stations and related equipment, all storage or holding tanks and equalization basins, collection lines, and all related appurtenances, repair and maintenance equipment, tools, and vehicles, together with buildings, structures, improvements, with the land tracts on which they are located as well as on-site treatment facilities, such as septic tanks, peat filter systems, holding tanks, drainage fields and related components together with lands, easements and rights-of-way related thereto. In carrying out its corporate purposes, the Authority shall have all the powers enumerated in KRS

273.171, KRS 58.010 to 58.210, inclusive, and KRS 65.210 to 65.300, inclusive, and in the Interlocal Cooperation Agreement referred to in Article I hereof, and shall specifically have power to contract and be contracted with, to sue and be sued, to acquire, own, hold and use real and personal property by purchase, lease, gift or in any other manner whatsoever, with power to deal with any and all such property in any manner consistent with the aforesaid purposes of the Authority, specifically including, but not by way of limitation, the power to sell and dispose of the same and to mortgage, lease or otherwise encumber the same, subject to the provisions hereof, and generally to have and treat such property in any way not inconsistent with the provisions of the previously cited statutory provisions and other applicable provisions of Kentucky law. The Authority shall have the power to hire and dismiss employees, and to procure necessary and appropriate professional services. The Authority shall have such additional powers as have been or may be delegated to it by the Counties.

The Authority shall have the power, on behalf of and at the specific direction of the Counties, to apply for and accept state or federal grants and loans, accept gifts and donations, accept and use stream impact mitigation fees and to borrow money, incur indebtedness and to issue its bonds, notes or other obligations in evidence of the same for the acquisition construction, installation and financing or refinancing of one or more sewer system project on behalf of the Counties, and, in the case of borrowed or bond funds, may pledge for the amortization of such loans or bonds, notes or other obligations and the revenues derived from the operation of facilities, including specifically all revenues derived from making available such project(s) directly to affected citizens of the Counties, on whose behalf and on whose directions such bonds, notes or other obligations are issued. In compliance with KRS 58.180, it shall be provided in any such financing or refinancing (i) that upon the retirement and discharge of the

bonds, notes or other obligations issued by the Authority at the direction of and on behalf of the Counties, full legal title to the sewer system project(s) so acquired shall be legally transferred to and ownership shall be vested in the respective County to the extent to which the benefit and proportioned cost of said project(s) was borne by that County; (ii) that in the event of default with respect to any such bonds, notes or other obligations the Counties shall have the exclusive option to acquire the sewer system project or sewer system projects for the amount required to discharge such bonds, notes or other obligations, and shall be provided a reasonable time to exercise such option; (iii) that the issuance of any such bonds, notes or other obligations shall be directed by and approved by the Counties not more than sixty (60) days prior to the date of issue of such obligations; and (iv) no bonds, notes or other obligations shall be issued by the Authority for and on behalf of the Counties except upon express direction of the Counties. Additionally, during the time any such bonds, notes or other obligations are outstanding, the Counties shall have a beneficial interest in the sewer system project(s) financed or refinanced thereby to such extent as may be necessary in order to comply with requirements of the federal and state governments in respect of the tax-exempt status of interest received on such bonds, notes or other obligations.

Article IV

In compliance with KRS 58.180, the Counties shall exercise either (i) organizational control over the Authority, at all times retaining the authority to alter or change the structure, organization, programs or activities of the Authority, including termination of the Authority, subject to the rights of the holders of any notes, bonds or other obligations of the Authority, or (ii) supervisory control over the Authority, as may be deemed proper by the Counties in the administration of the Authority's activities as an agency, instrumentality and constituted

authority of the Counties and as may be required from time to time by federal law in order to continue to qualify the Authority, as a statutory public corporation and constituted authority of the Counties; for the issuance of tax-exempt notes, bonds or other obligations on behalf of the Counties.

Article V

The Authority is organized solely to accomplish one or more of the public, civic and governmental purposes, as aforesaid, and as an agency and instrumentality and constituted authority of the Counties. The Authority is not organized for the making of any profit, and no private pecuniary profit shall at any time be derived by any officers or directors of the Authority. Any net revenues of the Authority beyond those necessary for the retirement of indebtedness or obligations of the Authority or the implementation of the public purposes of the Authority and the Counties shall not inure to the benefit of any person other than the Counties. The Authority shall not engage in propaganda or in any manner attempt to affect legislation.

The Authority, shall compliment and facilitate the engagement of any sewer service provider having facilities within the service area of the Authority that has sufficient design capacity in existing facilities to serve residents in the service area of the Authority.

Article VI

The permanent address of the registered office and the principal office of the Authority in Kentucky shall be: Troublesome Creek Environmental Authority, Inc., c/o KRADD, 917 Perry Park Road, Hazard, Kentucky, 41701. The resident agent of the Authority shall be the holder from time to time of the public office of the Executive Director of the Kentucky River Area

Development District, Perry County, Kentucky, the present incumbent being Paul Hall, whose address is: 917 Perry Park Road, Hazard, Kentucky 41701.

Article VII

Pursuant to KRS 273.187, the Authority shall not have any members. The Authority shall have no capital stock. The number of directors constituting the Authority's board of directors shall be five (5), consisting of one (1) director to be appointed by each Judge Executive of a participating County, with the approval of the respective Fiscal Court and two (2) at-large directors to be appointed jointly by the Judge Executives with the approval of the three Fiscal Courts. One at-large director shall be appointed from a list of nominees presented for this purpose by and representing the Kentucky Coal Association. One at-large director shall be appointed who is widely known in the service area of the Authority for his/her academic, business or professional acumen. Care shall be taken that collectively the individuals to be appointed as directors exhibit genuine interest in the purposes of the Authority, represent the diversity of the population within the Authority's service area, have demonstrated leadership qualities and common sense. Regarding term of office, the members appointed by each Judge Executive shall be co-terminus with the term of the appointing Judge Executive, subject to approval of the respective County Fiscal Court; at-large directors shall serve a five (5) year term. The initial terms of the at-large directors shall be varied in length, as set out below. Each member of the board of directors of the Authority shall continue to be a director upon the expiration of his term unless and until his successor is duly appointed. Any director appointed by a Judge-Executive may be removed from the board of directors by action of that Judge Executive, subject to the approval of the Fiscal Court of that County. An at-large director may

be removed by the joint action of the three Judge-Executives, subject to the approval of each of the three Fiscal Courts. A change in the number of directors shall be made only by amendment to these Articles of Incorporation.

The names and addresses of the five (5) directors who shall initially serve in accordance with these Articles of Incorporation, the respective County appointing them and their respective initial term are as follows:

	Name	Address	Appointing County	Years
1.	Charles Colwell	47 Gum Avenue, Hazard, KY 41701	Perry	thru 2006
2.	Jim Childers	390 Hurricane Br., Leburn, KY 41831	Knott	thru 2006
3.	Tim Spencer	17 War Creek Road, Jackson, KY 41339	Breathitt	thru 2006
Jointly Appointed Members:				
4.	Lewis H. Worrix	525 Picnic Hill Road, Jackson, KY 41339		thru 2011
5.	Don Gibson	3578 Possum Trot Road, Leburn, KY 41831		thru 2011

The Judge Executives of the respective Counties are the Incorporators and their names and addresses are as follows:

Name	Address	County
Lewis H. Warrix	Breathitt County Courthouse 1137 Main Street Jackson KY 41339	Breathitt
Randy Thompson	Knott County Courthouse P.O. Box 505 Hindman, KY 41822	Knott
Denny Ray Noble,	Perry County Courthouse P.O. Box 210 Hazard, KY 41702	Perry

Article VIII

Unless the board of directors of the Authority shall make express provision to the contrary by resolution, motion or other corporate action, the signature, or any authorized facsimile of the signature, of any director or officer of the Authority appearing upon any contract, note, bond, mortgage, certificate or other document of the Authority shall remain valid, binding and effective for all purposes, notwithstanding the fact that at the delivery or other intended effective date thereof such director or officer shall have ceased to be a director or shall have ceased to hold such office of the Authority. It is the intent of these Articles that the Authority shall be a legal corporate entity in its own right, separate and apart from the Counties but, nevertheless, as aforesaid, shall be and constitute the agency, instrumentality and constituted authority of the Counties in the performance of public, civic and governmental purposes. The undertakings, promises, commitments, notes, bonds, mortgages, conveyances and contracts of the Authority shall not in any manner or to any extent be deemed or construed to be binding upon the Counties, notwithstanding that it is the purpose of the Authority to serve as the agency, instrumentality and constituted authority of the Counties and to serve and promote public, civic

and governmental purposes and objectives of the Counties as regards development of sewer service along Troublesome Creek and its tributaries within the respective County jurisdictions.

Article IX

Neither the private property of the Incorporators nor that of any of the directors of the Authority, at present or in the future, shall be subject to or in any way liable for any debt, obligation or contract of the Authority or any judgment against the Authority, notwithstanding contravention of law.

Article X

The board of directors of the Authority shall have power to make and adopt by-laws and to alter or repeal the same pursuant to KRS 273.191. The Authority shall have as its officers a chair, a vice chair, and a treasurer each of whom shall be elected or appointed by the Board of Directors at such times, in such manner and for such terms not exceeding three (3) years as may be prescribed in the by-laws or by other official action of the board of directors. Such officers shall have such powers and duties as may be prescribed from time to time by the board of directors.

Article XI

The corporate existence of the Authority shall commence immediately upon the recording of these articles of incorporation in the office of the Secretary of State of Kentucky and the issuance by the Secretary of State of a certificate of incorporation, as provided by law.

IN TESTIMONY WHEREOF, witness the signatures of the undersigned Incorporators this 8th day of August, 2006.

Breathitt County Judge Executive

Knott County Judge Executive

Perry County Judge Executive

STATE OF KENTUCKY)

COUNTY OF Perry)

The undersigned, a Notary Public in and for the State and County aforesaid, does hereby certify that on this day the foregoing Articles of Incorporation were produced before me in my said County and State by Judge Executives [illegible], and [illegible] and they thereupon acknowledged to me that they executed the same as their voluntary act, as authorized, for the purposes therein expressed.

SUBSCRIBED TO in my presence this 11 day of July, 2006.

Mary Grigsby
NOTARY PUBLIC

My commission expires: June 10, 2009

Subscribed to in my presence this 8 day of August, 2006

Betty S. Curd
Notary Public

My Commission Expires
August 8, 2008

COMMONWEALTH OF KENTUCKY
TREY GRAYSON
SECRETARY OF STATE

STATEMENT OF CONSENT OF REGISTERED AGENT

Pursuant to the provisions of KRS Chapter 271B, 273, 275 or 362, the undersigned hereby consents to act as registered agent on behalf of the business entity named below and for that purpose submits the following statements:

1. The business entity is
   - [x] a corporation (KRS 271B or KRS 273)
   - [ ] a limited liability company (KRS 275)
   - [ ] a limited partnership (KRS 362)
2. The name of the business entity is Trouble Some Creek Environmental Authority, Inc.
3. The state or country of incorporation, organization or formation is Kentucky
4. The name of the initial registered agent is Paul E. Hall
5. The street address of the registered office address in Kentucky is 917 Perry Park Rd Hazard KY 41701
   Street City State Zip Code

Paul E Hall
Signature of registered agent

Paul E. Hall
Type or Print Name & Title, if applicable

Date: 8-11, 2006

SSC-109 (7/98) (See attached sheet for instructions)

AMENDED ARTICLES OF INCORPORATIO
FOR
TROUBLESOME CREEK ENVIRONMENTAL AUTHO

0644756.09
Trey Grayson
Secretary of State
Received and Filed
06/12/2009 10:44:04 AM
Fee Receipt: $8.00

amcray
NAOA

KNOW ALL MEN BY THESE PRESENTS:

COMES NOW the Troublesome Creek Environmental Authority, Inc., a non-profit organization, pursuant to KRS 273.267, by and through its duly appointed Board, there being no shareholders or members, and hereby states that at a duly noticed Special Board Meeting held on May 6, 2009, the Board upon a vote of a majority of Directors in office passed a resolution adopting certain amendments to the Articles of Incorporation as follows:

ARTICLE II is hereby amended and restated as :

> Upon the dissolution of this corporation, assets shall be distributed for one or more exempt purposes within the meaning of section 501 (c) (3) of the Internal Revenue Code, or the corresponding section of any future federal tax code, or shall be distributed to the federal government, or to a state or local government, for a public purpose.

ARTICLE III is hereby amended and restated as:

> Said corporation is organized exclusively for charitable, religious, educational and scientific purposes, including, for such purposes, the making of distributions to organizations that qualify as exempt organizations under section 501 (c)(3) of the Internal Revenue Code, or the corresponding section of any future federal tax code.
>
> Notwithstanding any other provision of these articles, the corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from Federal income tax under section 501 (c) (3) of the Internal Revenue Code, or the corresponding section of any future federal tax code, or (b) by a corporation, contributions to which are deductible under section 170(c) (2) of the Internal Revenue Code, or the corresponding section of any future federal tax code.

IN WITNESS WHEREOF, I have affixed my name as Chairman of the Board of Troublesome Creek Environmental Authority, Inc.
DATED: June 9, 2009.

Chairman of the Board
Troublesome Creek Environmental
Authority, Inc.

ATTEST: Secretary of the Board

COMMONWEALTH OF KENTUCKY

COUNTY OF Perry

I, Carolyn Howard, a Notary Public in and for the County and State aforesaid, do certify that the foregoing was this day produced to me and duly acknowledged before me in said County by Lewis Hibbard, personally known to me to be the Chairman of the Board of TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC., to be the act and deed of said corporation and of himself as Chairman of the Board, thereunto duly authorized.

Given under my hand this 9 day of June, 2009.

My commission expires: Dec 21, 2010.

Carolyn Howard
NOTARY PUBLIC

INTERLOCAL COOPERATION AGREEMENT

RECEIVED
JUN 21 2006
SECRETARY OF STATE
COMMONWEALTH OF KY

by and between

Breathitt County Fiscal Court
Knott County Fiscal Court
and
Perry County Fiscal Court

Relating to the Troublesome Creek Environmental Authority, Inc.

Dated Effective as of May 1, 2006

INDEX TO INTERLOCAL COOPERATION AGREEMENT

STATE OF KENTUCKY
COUNTY OF KNOTT

KENNITH GAYHEART, KNOTT COUNTY CLERK, IN AND FOR THE COUNTY AND STATE OF AFORESAID, DO CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING WAS

THE 29 DAY OF June 20 06
LOGGED IN MY OFFICE FOR RECORD WHEREUPON THE SAME WITH THE FOREGOING AND THIS CERTIFICATE HAVE BEEN DULY RECORDED IN MY OFFICE.

GIVEN UNDER MY HAND THIS 29 DAY OF June 20 06

11:59 AM

KENNITH GAYHEART, CLERK
KNOTT

BY: Rue Hays D.C.

Misc 6 Page 21

RECEIVED
PERRY COUNTY CLERK
2006 JUL 11 AM 9:41

TROUBLESOME CREEK INTERLOCAL COOPERATION AGREEMENT

This INTERLOCAL COOPERATION AGREEMENT (the Agreement"), dated as of May 1, 2006, is made and entered into by and among the Fiscal Courts of Breathitt, Knott and Perry Counties, Kentucky, each being duly established counties and political subdivision of the Commonwealth of Kentucky (hereafter referred to individually as "County" or "Party" or collectively as "Counties" or, "Parties"), and each acting by and through the respective Judge Executive, as authorized.

WITNESS:

WHEREAS, the Parties hereto seek to enter into an Interlocal Cooperation Agreement, pursuant to KRS 65.210 to 65.300, inclusive, in order to initiate a joint and cooperative undertaking for, inter alia, the improvement of water quality and enhancement of fish and wildlife dependent on Troublesome Creek by proactively engaging in planning, development, construction, operation and management of sewer system(s) to serve the Parties hereto, and to assume all rights, benefits, responsibilities, and obligations related thereto, including legal and fiscal rights and obligations relating to said system facilities to benefit their respective residents located along Troublesome Creek and its tributaries; and,

WHEREAS, the Parties desire to execute this Agreement for the purpose of providing for the establishment of a corporate vehicle, as the agency, instrumentality, and constituted authority of the Counties, to carry out the planning, development, financing, construction, operation and management of such sewer facilities that are necessary and environmentally and technologically appropriate to provide affordable sewer service to communities and individual households along Troublesome Creek for and on behalf of the Counties;

NOW, THEREFORE, in consideration of the premises and the mutual promises and covenants contained herein, the Parties hereto do hereby agree as follows:

ARTICLE I

Recitals

The Parties declare and agree that the following recitals constitute a true and accurate statement of the factual background incidental to the execution of this Agreement and represent legislative findings by the Parties and as such represent statements of public interest affecting the Parties, including their respective constituencies and prospective sewer system users, subject of this Agreement.

A. Pursuant to KRS 65.210 to KRS 65.300, inclusive, the Counties are authorized by way of an interlocal agreement to engage in a joint and cooperative undertaking, and, pursuant to KRS 58 develop a public project, and pursuant to KRS 273 establish a corporate entity to carry out the intended planning, acquisition, construction, financing, management, and operational activities. The Parties hereto, in accordance with such statutory authority, do now enter into such an Agreement providing for, inter alia, the creation and administration of the "Troublesome Creek Environmental Authority, Inc." (hereinafter, "Authority") to administer a cooperative undertaking consisting of the planning, development, financing, construction, operation and management of on site and centralized sewage collection and treatment facilities to serve residents of each of the Counties living along Troublesome Creek. Such facilities and related projects may include, but not be limited to sewage treatment plants, pumping stations, gravity and pressure main lines, and associated collection system facilities and appurtenances to be developed separately or in combination with the development, ownership and operation of on-site systems and system components such as septic tanks, packaged treatment systems, peat filtration systems, holding tanks, drainage fields and others as may be deemed appropriate to be constructed along Troublesome Creek and its tributaries in each of the Counties as well as the acquisition of related equipment and real properties.

B. It is the intent of the Parties and is directed herein that those individuals living along Troublesome Creek and its tributaries shall be provided access to sewer service by the Authority at the lowest reasonable costs. Further, any and all service provided by the Authority to residents within each of the Counties shall be subject to and under the jurisdiction of the Kentucky Public Service Commission and all rates and user fees subject to approval by that Commission.

C. Planning for sewer service generally and planning for component projects of the overall system for collection and treatment within the service area shall rest with the Authority and shall proceed with all due diligence by the Authority. Such planning responsibilities shall include the development of a comprehensive regional sewer facilities plan to encompass the Troublesome Creek drainage area as its designated planning area. Such plan shall identify and include appropriate stream quality enhancement measures to be constructed in the affected areas of the main stem and tributaries of Troublesome Creek in the course of sewer facilities construction as envisioned in this Agreement. The Authority shall cooperate in any reasonable manner with the Parties hereto and any related agencies or other governmental units directly engaged in provision of wastewater services in or adjacent to the planning area as set out in this section. Further, the Authority may serve as applicant, project manager, agent, administrator, or assume any other role as appropriate, to assist in applying for or otherwise securing funds from any source for the development of a sewer system.

D. The purposes of this Agreement are: 1) to provide for the creation and establishment of a legally constituted entity empowered to plan, design, develop, operate and maintain appropriate centralized sewage collection and treatment facilities, as well as to plan, own, operate and maintain on-site sewage systems, and apply

whichever method best serves a given community in the service area in a fully competent, responsible, and professional manner that bespeaks sound environmental stewardship; 2) authorize the incorporation of the Authority as a statutory, public, nonprofit corporation through which to carry out joint and cooperative undertakings relating to sewer system development and operation; 3) authorize the Authority to secure any and all legitimate funding for any sewer related project, including grants, donations, gifts, payments in lieu of taxes, stream impact mitigation fees as well as any form of financing and/or refinancing such as loans and the issuance of bonds or other obligations; 4) authorize the Authority to acquire, own, hold, operate, manage, lease, contract and otherwise secure any land, easements, rights of way, real property, services, facilities, materials and whatever related equipment it may come to own for purposes of providing sewer service; and 5) to retain by contract or employment qualified individuals or firms to assist in planning, funding, developing, managing, operating or maintaining the sewer facilities subject to this Agreement; and 6) plan for, conduct, inspect and enforce that any and all construction is carried out in a manner that best assures the protection and enhancement of the natural environment generally and safeguards and improves the water quality of Troublesome Creek specifically; and 7) authorize these and other actions which may benefit the Parties hereto and which are consistent with or which may be carried out pursuant to the provisions of KRS 65.210 to 65.300, inclusive, KRS 58.180, and KRS 273.161 to 273.390, inclusive.

ARTICLE 2

Authority, Effective Date, Duration, and, Administrator of Agreement

A. Authority: The Parties hereto, each constituting a "public agency" as that term is defined in KRS 65.230, voluntarily enter into this Agreement under the laws of the Commonwealth of Kentucky, including *KRS* 65.210 to 65.300, inclusive. Further, this Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. If any provision of this Agreement is held to be in conflict with any applicable statute or rule of law, or is otherwise held to be unenforceable, the invalidity of such portion shall not affect any or all of the remaining portions of this Agreement.

B. Effective Date: This Agreement shall become operational and have force and effect upon its execution by the Parties, approval by the Commissioner of the Governor's Office for Local Department, Commonwealth of Kentucky pursuant to KRS 65.260, and filing with the County Court Clerks of Breathitt, Knott and Perry Counties, Kentucky, and filing with the Office of the Secretary of State, Commonwealth of Kentucky all pursuant to KRS 65.260 and 65.290. Upon completion of such execution, approval and filings, this Agreement shall be in full force and effect.

C. Duration: The duration of this Agreement shall extend and remain in effect and be binding on the Parties hereto until and at which time those activities and actions, set out herein, or as may otherwise be contemplated by this Agreement, shall have been completed and all fiscal obligations of the Authority have been fully satisfied. The date of completion of such activities and actions and satisfaction of all fiscal obligations is anticipated to be not later than January 1, 2020.

D. Administrator: The Parties to this Agreement hereby designate the Kentucky River Area Development District to be the "administrator" of this Agreement, and charge same to assist in appropriate and timely planning and coordination of the various activities necessary for the implementation of the Agreement and to provide a brief report regarding the current status of the agreement to the Parties in January of each year, or as may be otherwise requested by the Parties hereto.

ARTICLE 3

Creation, Organization and Powers of the Authority

A. Creation: The Counties shall cause the creation of a corporation for public, civic, municipal and governmental purposes pursuant to the provisions of *KRS* 273.161 to 273.390, inclusive, *KRS* 58.180 and KRS 65.210 to 65.300, inclusive, to be named the "Troublesome Creek Environmental Authority Inc." (the "Authority"). The Judge Executives of the Counties shall be authorized to serve as incorporators of said corporation.

B. Organization: The Authority shall be at all times a nonprofit, non-stock public corporation pursuant to the provisions of KRS 273.161 to 273.390, inclusive, and *KRS* 58.180 for the performance of public, municipal, civic and governmental purposes, and shall be an agency, instrumentality and constituted authority of the Counties created and organized pursuant to, inter alia, KRS 58.180 and this Agreement. The purposes for which the Authority is organized are exclusively to assist and cooperate with, and to act on behalf of, at the direction of and as the agency, instrumentality and constituted authority of, the Counties in the planning, development, acquisition, construction, installation, operation, management, financing and refinancing of centralized or on site sewer systems, and all appurtenances thereof, and any related component projects for and on behalf of, and as the joint and cooperative undertakings of, the Counties in participation with and for the benefit of the Parties hereto.

Attached hereto as Exhibit A, and incorporated as a part hereof, is a form of the proposed Articles of Incorporation of the Authority, and reference is hereby made to Exhibit A for a description of the precise organization, composition and nature of the Authority organizational structure. The Authority shall be created and organized immediately after the effective date of this Agreement, as set out in the foregoing Article

2 hereof, and the Articles of Incorporation of the Authority shall be in substantially the form contained in Exhibit A, allowing for such minor changes and corrections as may be necessary or desirable upon the advice of counsel. The Authority is hereby directed by the Parties hereto to proceed with the planning, development, acquisition, construction, installation, operation, management and financing of the facilities envisioned by this Agreement, in part or whole.

It is specifically agreed by the Counties, and the bylaws of the Authority shall so provide, that a vote of two thirds of the directors of the Authority (constituting a quorum) present at any meeting of the directors shall be required in order for the board of directors of the Authority to take any official action.

C. Powers: In addition to the purposes and powers of the Authority as set out herein and in Exhibit A, the Authority shall possess such powers and authority as shall be delegated to it by the Parties hereto from time to time, including without limitation the power to own, operate and manage centralized and on site sewer facilities and all components thereof which may be reasonably added at the discretion of the Authority, until the entirety of the Troublesome Creek water shed is provide sewer service. Additionally, the Authority shall have and possess the specific powers and authority set out herein after, to wit:

(1) To act as the lead agency on behalf of the Parties hereto in applying for any form of financial assistance made available by the federal or state government in order to pay for the design and construction of sewer treatment and collection facilities necessary to implement the preferred alternatives in its regional facilities plan relating to the service areas encompassed by the Authority;

(2) To apply for grants, loans, or other similar revenues or funding from any source.

(3) To secure by employment, contract, or other means qualified personnel to plan, develop, finance, manage, operate and maintain all facilities subject to this agreement pursuant to a staffing plan.

(4) To employ qualified engineers, accountants, attorneys, administrators, and any other advisers deemed necessary by the Authority, and to award construction contracts to implement any sewer project in a manner consistent with proper governmental procurement as delineated in KRS 45A;

(5) To serve as the single point of contact for and on behalf of the Parties hereto as relates to any and all federal and state environmental or utility regulatory agencies and further, to act as agent for the respective Parties as regards any enforcement

actions, stemming from or arising out of issues stemming from this Agreement with the understanding that costs for resolution of same shall be borne solely by the Authority, as warranted.

(6) To own or lease, to operate, maintain, and manage centralized or on site treatment facilities, pumping stations, storage facilities and collection lines together with all necessary and appropriate equipment, vehicles and tools as may be required.

(7) To charge all users of the sewer system fair and equitable rates, fees and charges for such use pursuant to tariffs approved by the Kentucky Public Service Commission.

(8) To invoke penalties for failure to pay the charges assessed the customers serviced hereunder;

(9) To establish effluent standards for accepting discharge and monitor compliance with those standards;

(10) To adopt appropriate rules and regulations for enforcing those standards, including invoking penalties for non-compliance;

(11) To issue revenue bonds in accordance with KRS 58.010 to 58.210, inclusive, and any other applicable provision of the KRS;

(12) To accept donations or gifts from any lawful source and to accept appropriations and grants from the federal government or any agency thereof and appropriations, loans or grants from the Commonwealth of Kentucky, or any agency thereof, or from any county, city or other political subdivision;

(13) To sue and be sued;

(14) To execute any and all contracts and other documents necessary to effectuate the purposes for *which* the Authority is created;

(15) To mortgage and pledge properties and revenues and provide for the repayment of any obligations incurred by the Authority;

(16) To acquire, hold and dispose of real and personal property used by the Authority in the furtherance of the development of the sewer service envisioned in this Agreement;

(17) To pay reasonable per diem allowance to the Directors including reimbursement of reasonable and necessary expenses incurred by

the Directors and to pay reasonable salaries to any officers and employees of the Authority;

(18) To request the appropriate unit of government to exercise the power of eminent domain as provided by law when warranted; and

(19) To implement the preferred alternatives in its regional sewer facilities plan.

(20) To conduct all financial affairs and transactions according to sound governmental fiscal procedure and secure an independent audit of all funds and fiscal transactions annually.

(21) To perform any and all other acts and deeds deemed necessary or desirable in the furtherance of the Authority's purpose as permitted by law and within the limitations contained herein.

ARTICLE 4

Manner of Funding Facilities Development; Budget

A. Funding: In order to fund the planning, design, construction of facilities and the acquisition of necessary lands, easements and rights of way as well as equipment for any one section or component or more than one section or component of the overall sewer system that the Authority is herein authorized to undertake, the Authority may expend cash funds received from any source to include but not be limited to gifts, donations and grants from state and federal agencies, via general fund appropriations, coal severance funds, stream impact mitigation fees and monies from other fund sources. Additionally, the Authority may borrow funds or issue revenue bonds in accordance with the provisions of KRS 58.010 to 58.210, inclusive, to which statutory provisions reference is hereby made. Such loans or bonds shall be payable from revenues to be derived by the Authority from the receipt of user charges and fees, and from other revenues which may be received from the participating Counties, federal and state agencies and any other source. Special Note: It is the declared intent and desire of the Parties to this Agreement that one source of funds to be secured for the development of the sewer facilities envisioned herein may be 'stream impact mitigation fees'. It is understood by the Parties that such fees, assessed in the course of the mine permitting process and remitted by the coal companies may be directed to the Authority in the amounts and in the manner approved by the mine permitting agency(ies) having jurisdiction. All such funds received by the Authority shall be used solely for the purposes of the Authority, accounted for and reported in the form and manner consistent with current governmental accounting principals and procedures and subject to the Authority's annual audit by an independent certified public accountant.

B. Budget: The Authority shall establish a budget on an annual basis and shall maintain such budget by seeking and obtaining appropriations, loans and grants from federal or state agencies, from the Parties hereto and by acceptance of other donations or gifts from any lawful source, and from charging customers, reasonable rates, fees and charges for use of the Authority's facilities, as approved by the Kentucky Public Service Commission. A copy of the Authority's annual budget shall be provided to the Parties not later than April 1st of each year.

ARTICLE 5

Termination of Agreement; Disposal of Property

A. Termination of Agreement: Any Party hereto may withdraw from this Agreement and may withdraw from participation in the sewer system project at any time prior to a scheduled date of public sale of revenue bonds of the Authority or signing of a bank note or other form of indebtedness to be issued to finance, any portion of the sewer system project upon written notice to the other Parties hereto. Upon withdrawal of any Party hereto from this Agreement and participation in the Project, this Agreement shall be deemed to be terminated as to such Party, and such Party's representation on the Board of Directors of the Authority shall be eliminated by appropriate action of the Authority, including amendment of its Articles of Incorporation. Except as expressly set forth in this section no Party hereto may withdraw from this Agreement or from participation in the sewer system project, and this Agreement may not be terminated in any respect, until the date of final payment and retirement (or satisfactory arrangements are made for the payment and retirement) of all of the revenue bonds or other financing issued or incurred to finance any one or other component of the sewer system project and the complete satisfaction of all other obligations and commitments of the Parties hereto pertaining to such revenue bonds, loans or other indentures secured in the name of the Authority.

Upon the final payment and retirement (or satisfactory arrangements are made for the payment and retirement) of all of the revenue bonds or other financing issued or incurred to finance the sewer system project and the complete satisfaction of all other obligations and commitments of the Parties hereto pertaining to such revenue bonds or other financing any Party hereto may withdraw from this Agreement and from participation in the sewer system project in the manner and with the effect set out in Article 5 B, below. If no debt or bond obligation has been incurred by the Authority, this Agreement may be terminated upon appropriate action of all the Parties hereto, pending appropriate legal notice.

B. Disposition of Property: Upon termination of this Agreement, all appropriate action shall be taken for the dissolution of the Authority and disposal of its assets and satisfaction of its liabilities according to the provisions of Article II of Exhibit A hereto, and in a fair and equitable manner as the Parties may determine.

ARTICLE 6

Loans, Bonds and Other Financing Obligations Not General Obligations or Indebtedness of Parties; No Personal Liability

A. Loan and Bonded Indebtedness: Any loan, revenue bond, or other financial obligations incurred to finance the Authority's sewer system project and any component thereof shall be obligations of the Authority and shall be payable solely from and secured by a pledge of (i) the proceeds of the bonds or other financing until disbursed, (ii) the investment of such proceeds and (iii) all revenues, funds, proceeds of insurance and other assets pledged under the documentation securing the loan(s), bonds or other obligations.

B. Not General Obligation or Personal Liability: Loan(s), bonds or other financing obligations that may be incurred by the Authority, as authorized by the Parties, shall not constitute an indebtedness of any of the Parties hereto, neither individually or collectively, nor be payable out of any general or special tax revenues of any of the Parties hereto, within the meaning of any constitutional provision or limitation.

None of the officials of the Parties hereto or any of the members of the legislative bodies of the Parties hereto, or any directors, officers or employees of the Authority, shall be subject to or in any way liable for any debt, bond obligation, contract or other fiscal obligation or expense legally incurred in furtherance of the sewer system project, subject of this Agreement.

ARTICLE 7

Execution in Counterparts

This Agreement may be executed in any number of counterparts, and each such counterpart shall constitute an original and all such counterparts shall constitute one and the same instrument.

ARTICLE 8

Addresses and Places of Business

The principal Offices and places of business of the Parties hereto are set forth in the respective signature blocks of the Parties hereto at the end of this Agreement.

BREATHITT COUNTY

IN TESTIMONY WHEREOF, witness the signatures of the Parties hereto, duly authorized, as of the date first above written. For convenience in execution, the Judge Executives of each participating County to this Agreement have signed or shall sign on the same page as the page on which their signatures are acknowledged, and the signatures and acknowledgment of each party appear or shall appear on a separate page, following.

This instrument was jointly reviewed and approved by:

_____, Breathitt County Attorney

_____, Knott County Attorney

_____, Perry County Attorney

APPROVAL AS TO PROPER FORM AND COMPATIBILITY WITH STATUTE

I, Steve Robertson the undersigned, Commissioner of the Governor's Office of Local Development, Commonwealth of Kentucky, hereby certify that the Agreement captioned Interlocal Cooperation Agreement by and between Breathitt County, Knott County and Perry County, Kentucky relating to the Troublesome Creek Environmental Authority, Inc., has been duly filed with this Office and has been found to be in proper form and is compatible with state statutes, pursuant to KRS 65.260.

Dated this ____ day of _____, 200__.

06/20/06

Commissioner
GOVERNOR'S OFFICE FOR LOCAL DEVELOPMENT
COMMONWEALTH OF KENTUKCY

IN TESTIMONY WHEREOF, witness the signatures of the Parties hereto, duly authorized, as of the date first above written. For convenience in execution, the Judge Executives of each participating County to this Agreement have signed or shall sign on the same page as the page on which their signatures are acknowledged, and the signatures and acknowledgment of each party appear or shall appear on a separate page, following.

This instrument was jointly reviewed and approved by:

_____, Breathitt County Attorney

_____, Knott County Attorney

_____, Perry County Attorney

APPROVAL AS TO PROPER FORM AND COMPATIBILITY WITH STATUTE

I, Steve Robertson the undersigned, Commissioner of the Governor's Office of Local Development, Commonwealth of Kentucky, hereby certify that the Agreement captioned Interlocal Cooperation Agreement by and between Breathitt County, Knott County and Perry County, Kentucky relating to the Troublesome Creek Environmental Authority, Inc., has been duly filed with this Office and has been found to be in proper form and is compatible with state statutes, pursuant to KRS 65.260.

Dated this ____ day of _____, 200__.

06/20/02

Commissioner
GOVERNOR'S OFFICE FOR LOCAL DEVELOPMENT
COMMONWEALTH OF KENTUKCY

IN TESTIMONY WHEREOF, witness the signatures of the Parties hereto, duly authorized, as of the date first above written. For convenience in execution, the Judge Executives of each participating County to this Agreement have signed or shall sign on the same page as the page on which their signatures are acknowledged, and the signatures and acknowledgment of each party appear or shall appear on a separate page, following.

This instrument was jointly reviewed and approved by:

_____, Breathitt County Attorney

_____, Knott County Attorney

_____, Perry County Attorney

APPROVAL AS TO PROPER FORM AND COMPATIBILITY WITH STATUTE

I, Steve Robertson the undersigned, Commissioner of the Governor's Office of Local Development, Commonwealth of Kentucky, hereby certify that the Agreement captioned Interlocal Cooperation Agreement by and between Breathitt County, Knott County and Perry County, Kentucky relating to the Troublesome Creek Environmental Authority, Inc., has been duly filed with this Office and has been found to be in proper form and is compatible with state statutes, pursuant to KRS 65.260.

Dated this ____ day of _____, 200__.

06/20/06

Commissioner
GOVERNOR'S OFFICE FOR LOCAL DEVELOPMENT
COMMONWEALTH OF KENTUKCY

BREATHITT COUNTY, KENTUCKY

The address, principal office and place of business of Breathitt County is:

Breathitt County Fiscal Court
Breathitt County Courthouse
1137 Main Street
Jackson KY 41339

Lewis H. Warrix, Judge Executive

By: _____
Judge Executive

Attest: Authorized by action of the Fiscal Court on March 29, 2006.

_____
County Court Clerk

STATE OF KENTUCKY
COUNTY OF Breathitt

The foregoing instrument was acknowledged before me this 11 day of April, 2006, by Lewis H. Warrix and Tony G. Watts who are the County Judge Executive and the County Court Clerk respectively, of Breathitt County, Kentucky, on behalf of said County.

WITNESS my signature this 11 day of April, 2006. My Commission expires: 11-19-09.

Wanda K Barrett
Notary Public in and for
said County and State

Breathitt County

BREATHITT COUNTY, KENTUCKY

The address, principal office and place of business of Breathitt County is:

Breathitt County Fiscal Court
Breathitt County Courthouse
1137 Main Street
Jackson KY 41339

Lewis H. Warrix, Judge Executive

By _____
Judge Executive

Second Reading & Adoption

Attest: Authorized by action of the Fiscal Court on April 25, 2006.

_____
County Court Clerk

STATE OF KENTUCKY
COUNTY OF BREATHITT

The foregoing instrument was acknowledged before me this 25 day of April, 2006, by Lewis H. Warrix and Tony G. Watts who are the County Judge Executive and the County Court Clerk respectively, of Breathitt County, Kentucky, on behalf of said County.

WITNESS my signature this 25 day of April, 2006. My Commission expires: 11-19-09.

Wanda K Barrett
Notary Public in and for
said County and State

KNOTT COUNTY, KENTUCKY

The address, principal office and place of business of Knott County is:

Knott County Fiscal Court
Knott County Courthouse
P.O. Box 505
Hindman, KY 41822

Randy Thompson, Judge Executive

By _____
Judge Executive

Attest: Authorized by action of the Fiscal Court on April 31, 2006.

Kenneth Sayhearl
County Court Clerk

STATE OF KENTUCKY
COUNTY OF Knott

The foregoing instrument was acknowledged before me this 31 day of April, 2006, by Randy Thompson and Kenneth Sayhearl who are the County Judge Executive and the County Court Clerk respectively, of Knott County, Kentucky, on behalf of said County.

WITNESS my signature this 31 day of ~~April~~ May, 2006. My Commission expires: 9-23-09.

Carolyn Sayhearl N.C.
Notary Public in and for
said County and State

Perry County

PERRY COUNTY, KENTUCKY

The address, principal office and place of business of Perry County is:

Perry County Fiscal Court
Perry County Courthouse
P.O. Box 210
Hazard, KY 41702

Denny Ray Noble, Judge Executive

By Denny R Noble
Judge Executive

Attest: Authorized by action of the Fiscal Court on March 30, 2006.

Haven King
County Court Clerk

STATE OF KENTUCKY
COUNTY OF Perry

The foregoing instrument was acknowledged before me this 30 day of March, 2006, by Denny Ray Noble and Haven King who are the County Judge Executive and the County Court Clerk respectively, of the Perry County, Kentucky, on behalf of said County.

WITNESS my signature this 30 day of March, 2006. My Commission expires: 8-11-09.

Donya Dyer
Notary Public in and for
said County and State

CERTIFICATE OF BREATHITT COUNTY CLERK AS TO FILING OF A COPY OF THE AGREEMENT

I, _____, being the duly elected Breathitt County Court Clerk, certify that a fully executed copy of the document styled Interlocal Cooperation Agreement by and Breathitt County, Knott County and Perry County relating to the Troublesome Creek Environmental Authority, Inc. was duly filed in the Breathitt County Court Clerk's Office, this the _____day of _____, 200__.

By:_____

Knott County

CERTIFICATE OF KNOTT COUNTY CLERK AS TO FILING OF A COPY OF THE AGREEMENT

I, Kennith Ray Gayheart being the duly elected Knott County Court Clerk, certify that a fully executed copy of the document styled Interlocal Cooperation Agreement by and Breathitt County, Knott County and Perry County relating to the Troublesome Creek Environmental Authority, Inc. was duly filed in the Knott County Court Clerk's Office, this the 29 day of June, 2006.

By: Carolyn Gayheart DC

STATE OF KENTUCKY
COUNTY OF KNOTT

KENNITH GAYHEART, KNOTT COUNTY CLERK, IN AND FOR THE COUNTY AND STATE OF AFORESAID DO CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING WAS ON THE 29 DAY OF June 20 06 LODGED IN MY OFFICE FOR RECORD, WHEREUPON THE SAME WITH THE FOREGOING AND THIS CERTIFICATE HAVE BEEN DULY RECORDED IN MY OFFICE.

GIVEN UNDER MY HAND THIS 29 DAY OF June 20 06

KENNITH GAYHEART, CLERK

BY Rue Harp D.C.

Misc Book 6
11:57 AM Page 315

CERTIFICATE OF PERRY COUNTY CLERK AS TO FILING OF A COPY OF THE AGREEMENT

I, _____, being the duly elected Perry County Court Clerk, certify that a fully executed copy of the document styled Interlocal Cooperation Agreement by and Breathitt County, Knott County and Perry County relating to the Troublesome Creek Environmental Authority, Inc. was duly filed in the Perry County Court Clerk's Office, this the _____day of _____, 200__.

By:_____

STATE OF KENTUCKY

COUNTY OF PERRY

I, HAVEN KING, CLERK OF THE STATE AND COUNTY AFORESAID DO CERTIFY THAT THE FOREGOING INSTRUMENT WAS LODGED FOR RECORD IN MY OFFICE AND IT THE FOREGOING AND THIS MY CERTIFICATE HAVE BEEN DULY RECORDED IN MY OFFICE IN Misc BOOK NO. 37 PAGE 207.

WITNESS MY HAND THIS 11th DAY OF July 2006.

HAVEN KING, CLERK
PERRY COUNTY

BY Barbara Sue Franks

TEMPORARY CONSTRUCTION EASEMENT

THIS TEMPORARY CONSTRUCTION EASEMENT made and entered into this 1 day of OCTOBER, 2009, by and between CONSOL OF KENTUCKY INC. ("Grantor"), P. O. Box 130, Mousie, KY 41839, Party of the First Part, and TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC. ("Grantee"), a public corporation created pursuant to KRS 58,180, with a mailing address of 917 Perry Park Road, Hazard, KY 41701, Party of the Second Part.

W I T N E S S E T H

WHEREAS, Grantor is the owner of certain property located at Knob Bottom Hollow, and

WHEREAS, Grantee owns adjacent real estate which is scheduled for development of a public sewer plant to service the Ball Creek watershed ("the Plant"), and

WHEREAS, as a part of the planned construction of the Plant, it is anticipated that site preparation will require the borrowing of fill and grade material from the adjoining owner, the Grantor, and

WHEREAS, due to the public nature and beneficial purpose of that anticipated Plant will have on the watershed and the people who inhabit its banks, the Grantor is inclined to assist the Grantee in this endeavor.

NOW THEREFORE, for and in consideration of the preamble herein stated and the payment of $10.00 as good and valuable consideration, the parties hereby agree as follows:

1) The borrowing site is a designated area shown on the map attached hereto as Exhibit A.

2) The Grantor owns the borrowing site by virtue of a deed from Cullen B. Owens and Evelyn G. Owens, his wife, and Oscar B. Owens, single, dated September 15, 1999, as recorded in Deed Book 192, Page 405, records of the Knott County Court Clerk.

3) The Grantor hereby grants a temporary easement for purposes of removing top soil and other loose material from the borrowing site to be used by the Grantee in creating grade and fill foundation for the Plant. That Grantor further grants a temporary right of way for equipment and men to ingress and regress to the borrowing site, which together is referred to as "the Work".

4) The Grantee shall access and use the borrowing site for the exclusive purpose of retrieving fill and grade material necessary for the foundation of the plant. Grantee should undertake the Work in a workmanlike manner. Grantor shall, upon completion of the Work, leave the borrowing site in a stable manner by grading and establishing drainage for the area disturbed to prevent erosion.

5) The duration of this temporary easement shall be so long as the fill and grade material is needed by Grantee, but in no circumstance shall it exceed two (2) years from the start of the construction project for the Plant.

6) The Grantee agrees to indemnify and save harmless the Grantor from any claim loss expense damage or liability suffered by the Grantor as a result of the temporary rights granted herein or the undertaking of the above described work.

This Temporary Construction Easement shall be binding upon and shall inure to the benefit of all parties hereto and their successors in interest, be it Grantee, Grantee's heirs or assigns.

In witness whereof, the parties have hereunto set their hand this day and date aforesaid.

GRANTOR:

CONSOL OF KENTUCKY, INC.

BY: _____

TITLE: _____

GRANTEE:

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

BY: _____

TITLE: _____

COMMONWEALTH OF KENTUCKY

COUNTY OF Knott

I, JAMES ORBIN CHILDERS, a Notary Public in and for the County and State aforesaid, do certify that the foregoing Temporary Construction Easement between Consol of Kentucky Inc. and Troublesome Creek Environmental Authority, Inc. was this day produced to me and duly acknowledged before me in said County by JACK RICHARDSON personally known to me to be the VICE President of CONSOL OF KENTUCKY INC., to be the act and deed of said corporation and of himself as VICE PRESIDENT thereof, thereunto duly authorized.

Given under my hand this 1 day of October, 2009.

My commission expires: 6-19-2011.

James Orbin Childers
NOTARY PUBLIC

COMMONWEALTH OF KENTUCKY

COUNTY OF PERRY

I, JAMES Orbin Childers, a Notary Public in and for the County and State aforesaid, do certify that the foregoing Temporary Construction Easement between Consol of Kentucky Inc. and Troublesome Creek Environmental Authority, Inc. was this day produced to me and duly acknowledged before me in said County by LEWIS H. LARRIX personally known to me to be the CHAIRMAN of TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC. , to be the act and deed of said corporation and of himself as CHAIRMAN thereof, thereunto duly authorized.

Given under my hand this _____ day of _____, 2009.

My commission expires: _____.

James Orbin Childers
NOTARY PUBLIC

This document prepared by:

Calvin R. Tackett, Esquire
40 Main Street
Whitesburg, KY 41858

22 Oct 09

22 Oct 09

Deed B 249 Page 77

DEED OF CONVEYANCE

THIS DEED OF CONVEYANCE made and entered into this the 1 day of October, 2009, by and between **CONSOL of Kentucky Inc.**,P. O. Box 130, Mousie, Kentucky 41839, party of the first part and **Troublesome Creek Environmental Authority**, Inc. a public corporation created pursuant to KRS 58.180, 917 Perry Park Road, Hazard, Kentucky 41701, party of the second part.

The in-care-of address for the Knott County Tax Bill for 2009 is CONSOL of Kentucky Inc.,P.O. Box 130, Mousie, Kentucky 41839

WITNESSETH:

That for and in consideration of Thirty Thousand dollars ($30,000.00) cash in hand paid the receipt and sufficiency of which is hereby acknowledged, the party of the first part grants and conveys to the party of the second part the surface estate only of the property described as follows:

Description for a certain tract or parcel of land lying and being in the Commonwealth of Kentucky, county of Knott, near the community of Vest, approximately 2.5 miles west along KY Route 1087 from the junction of KY Route 1087 and 4 lane KY Route 80 at Softshell, and being more particularly described as follows:

Unless otherwise stated any monument referred to as a capped pin set is an 18" inch rebar 5/8" inch in diameter with a plastic cap inscribed R. M. Johnson Engineering, PLS 3521 or Roy D. Patrick PLS 3521.

Beginning at a point in the center of Knob Bottom Hollow, said point being a common point in a tract of land now or formerly owned by CONSOL of Kentucky, Inc. as recorded in a deed from Cullen B. Owens, et al, dated September 15, 1999 in Deed Book 192, Page 405, records of the Knott County Court Clerk's Office. Said point has an approximate Kentucky South Zone 1983 Datum State Plane Coordinate value of north: 2,038,957.0971 and east: 2,442,062.5002 and is referenced by a line extending N 62° 32' 45" E, a distance of 151.80' feet from the inlet end of a culvert with concrete headwall running underneath KY Route 1087 at the mouth of Knob Bottom Hollow, and by a line extending N 67° 36' 13" E, a distance of 186.38' feet from the outlet end of the same culvert with concrete headwall running underneath KY Route 1087, thence leaving the center of Knob Bottom Hollow, severing the CONSOL of Kentucky, Inc. tract, following the new lines of CONSOL of Kentucky, Inc., for twenty-six (26) calls as follows:

N 01° 20' 26" E, a distance of 8.14' feet to a capped pin set;

N 37° 59' 08" W, a distance of 17.93' feet to a capped pin set;

N 08° 46' 37" E, a distance of 86.88' feet to a capped pin set;

N 07° 40' 29" E, a distance of 154.64' feet to a capped pin set;

N 03° 28' 12" E, a distance of 97.88' feet to a capped pin set;

N 13° 02' 21" E, a distance of 160.78' feet to a capped pin set;

N 82° 33' 45" E, a distance of 43.06' feet to a capped pin set;

N 82° 33' 45" E, a distance of 10.86' feet to a point in the center of Knob Bottom Hollow; thence following the center of Knob Bottom Hollow;

S 24° 28'43" E, a distance of 18.35' feet to a point;

S 07° 41'30" E, a distance of 33.21' feet to a point;

S 02° 02'04" W, a distance of 32.52' feet to a point;

S 00° 12'47" E, a distance of 69.82' feet to a point;

S 04° 48'53" E, a distance of 35.09' feet to a point;

S 00° 39'14" W, a distance of 76.90' feet to a point;

S 04° 32'21" E, a distance of 27.51' feet to a point;

S 06° 50'02" W, a distance of 62.28' feet to a point;

S 00° 28'02" E, a distance of 68.75' feet to a point;

S 12° 17'59" E, a distance of 67.16' feet to a point;

S 05° 06'46" W, a distance of 36.73' feet to a point;

S 14° 31'57" W, a distance of 10.67' feet to a point;

S 62° 54'31" W, a distance of 25.70' feet to a point;

N 75° 18'10" W, a distance of 32.34' feet to a point;

N 79° 19'49" W, a distance of 11.53' feet to a point;

N 88° 32'50" W, a distance of 45.35' feet to a point;

N 64° 30' 26" W, a distance of 27.48' feet to the beginning containing 1.34 acres more or less, as per a survey by R. M. Johnson Engineering, Inc. completed on July 16, 2008.

It is understood by all parties that employees of CONSOL of Kentucky, Inc. shall be allowed to enter upon the property at anytime, and at their expense, to check the existing ground water monitoring well located there, until such time that it is no longer in use.

It is also understood by all parties that there shall exist a perpetual easement being 20' feet in width, to allow for ingress and egress and installation of any utilities or other appurtenances that might be necessary for the use and convenience of the owners of the tract of land herein being described above, provided that the perpetual easement be kept free and clear of any obstructions as to allow for ingress and egress to the adjoining property remaining owned by CONSOL of Kentucky, Inc., and being more particularly described as follows:

Beginning at the intersection of the centerline of the access road leading to the property being described herein, and the eastern edge of KY Route 1087, said point has an approximate Kentucky South Zone 1983 Datum State Plane Coordinate value of north: 2,038,917.8847 and east: 2,441,898.6519, and is referenced by a line extending S 43° 26' 24" E, a distance of 42.38' feet from the inlet end of a culvert and concrete headwall running underneath KY Route 1087 at the mouth of Knob Bottom Hollow, and by a line extending S 14° 55' 26" W, a distance of 32.91' feet from the outlet end of the same culvert with concrete headwall running underneath KY Route 1087, thence leaving the eastern edge of KY Route 1087 and following the centerline of said perpetual easement for eight (8) calls as follows:

N 83° 44' 24" E, a distance of 27.33' feet to a point;

N 89° 24' 24" E, a distance of 33.21' feet to a point;

N 76° 47' 28" E, a distance of 23.33' feet to a point;

N 62° 24' 25" E, a distance of 21.16' feet to a point;

N 57° 34' 30" E, a distance of 19.31' feet to a point;

N 35° 48' 25" E, a distance of 33.41' feet to a point;

N 22° 33' 40" E, a distance of 17.63' feet to a point;

N 06° 12' 28" E, a distance of 42.32' feet to a point in the existing access road on the western boundary of the tract of land being described herein above and there ending.

Being part of the land conveyed to CONSOL of Kentucky Inc., by deed from Cullen B. Owens and Evelyn G. Owens, his wife, and Oscar B. Owens, single, dated September 15, 1999, recorded in Deed Book 192, Page 405, Knott County.

Party of the first part retains the rights to the water monitoring well located on the property and reasonable rights of ingress and egress to that well including but not limited to the right to connect electric power to the well and a water pipeline.

The coal underlying this property has been extracted and the surface overlying or adjacent to the underground workings may be subject to subsidence. Any structures erected hereafter should be designed and constructed so as to prevent or minimize any subsidence damage.

All coal, oil, gas and other minerals, mineral buy products and minerals owned by the party of the first part are excepted from this conveyance. The party of the first part expressly reserves unto it self, its successors and assigns all of the necessary rights and privileges to mine, drill for, produce and transport the coal and other minerals from the property described hereinabove.

CONSIDERATION CERTIFICATE

WE, CONSOL of Kentucky Inc., party of the first part and **Troublesome Creek Environmental Authority** party of the second part, do hereby certify and swear, pursuant to KRS Chapter 382, that the full and complete consideration paid for the hereinabove described real property is $30,000.00

TO HAVE AND TO HOLD said tract of land, with all appurtenances thereunto belonging unto the party of the second part, its successors and assigns and with covenant of Special Warranty.

IN WITNESS WHEREOF, the party of the first part and party of the second part have hereunto subscribed their names the day and year aforesaid.

CONSOL OF KENTUCKY INC.

By: _____
JACK RICHARDSON

Its: Vice President

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY INC., a Public Corporation

By: _____
LEWIS H. WARRIX
Its: Chairman of The Board

STATE OF Kentucky)

COUNTY OF Knott)

The foregoing deed and consideration statement was subscribed and sworn to and acknowledged before me this 1 day of October, 2009, by Jack Richardson, as Vice President of CONSOL of Kentucky Inc., for and on behalf of the corporation.

My commission expires: 6-19-2011

James Orbin Chilton
Notary Public

STATE OF Kentucky)

COUNTY OF Perry)

The foregoing consideration statement was subscribed and sworn to before me this 20 day of October, 2009, by Lewis H. Warrix, as Chairman of the Board of Troublesome Creek Environmental Authority, Inc., a Public Corporation, for and on behalf of the corporation.

My commission expires: 6-19-2011

James O. Chilton
Notary Public

COMMONWEALTH OF KENTUCKY)

COUNTY OF KNOTT)

I, Ken Gayheart, clerk of the county court in and for the county and commonwealth aforesaid, certify that the foregoing Deed was on the 22 day of October, 2009, at 10:44 o'clock A .m. lodged for record whereupon the same with the foregoing and this certificate has been duly recorded in my office in Deed Book 249, Page 82.

Witness my hand this 22 day of Octoha, 2009.

KNOTT COUNTY CLERK

BY: Gwi Hays
D.C.

With $30.00 tax paid on same.

THIS DOCUMENT PREPARED BY:

CALVIN R. TACKETT, ESQUIRE
ATTORNEY AT LAW
40 MAIN STREET
WHITESBURG, KY 41858

Troublesome Creek Environmental Authority
Public Hearing for Interested Parties for the Ball Creek WWTP and Collection Lines Project
December 8, 2009
6:00PM
Knott County Sportsplex

Ron Johnson opened the meeting by introducing, himself, Greg May, Steve Harris, Don Gibson, Jim Childers, Judge Executive Randy Thompson and Jennifer McIntosh. Mr. Johnson explained that the project is ready to bid. Phase I includes building a WWTP at Knob Bottom Branch off of HWY 1087. He explained how the collection lines would be ran from the Sportsplex to the WWTP.

Greg May explained types of sewer systems to those in attendance stating that a typical electric bill for a pump is between $1.00 and $3.00. He also explained that the electrical connection and from the residents house to the pump would the responsibility of the resident.

Average rates will be approximately $35.00 per month for 4,000 gallons of usage, with a minimum rate of approximately $19.00 for 2,000 gallons of usage. Usage will be based on water consumption. If a resident has a well, they will be billed a flat fee per month. Tap on fee will be waived if sign-up before project begins. Afterwards typical tap-on will be between $2,400 and $2, 600.

Those in attendance asked questions and then the meeting adjourned.

_____ _____

Don Gibson Jim Childers

_____ _____

Ron Johnson Greg May

_____

Jennifer McIntosh

Those who wish to be contacted for free tap-on:

Vivian Patrick
1300 W HWY 1087
Soft Shell, KY 41831

Carley Bankes
1716 W HWY 1087
Soft Shell, KY 41831

Ron Williamson
2070 W HWY 1087
Soft Shell, KY 41831

Wade Miller
2181 W. HWY 1087
Soft Shell, KY 41831

Tabitha Miller (Owner Ron Williamson)
2178 W HWY 1087
Soft Shell, KY 41831

Bob Meyer

From: Conley [jconley@wpplp.com]
Sent: Tuesday, December 01, 2009 1:49 PM
To: Bob Meyer
Cc: Ron Johnson
Subject: FW: Those expressing interest in Chestnut Mountain

This gives you an idea of the type of interest we have had for developing in Chestnut Mountain. Maybe this additional info will be of some help.

From: Spencerdebby@aol.com [mailto:Spencerdebby@aol.com]
Sent: Tuesday, December 01, 2009 1:48 PM
To: Conley
Subject: Those expressing interest in Chestnut Mountain

Over the past two years, the following people have expressed interest in possibly building a home or opening a business in Chestnut Mountain:

- (Owners of nine McDonalds) – Interested in building a McDonalds and has money in escrow specifically to purchase lot at Chestnut Mountain
  - ✓ Interest in purchasing a home in Chestnut Mountain
  - ✓ Interested in partnering on the cinema or building it themselves.
  - ✓ Bank has expressed interest in building a branch at Chestnut Mountain
- (Owner of Isom IGA) – Interested in building a 4-plex Cinema
- (Group in Prestonsburg) – Interested in building Steak House
- (Owns a pharmacy in Perry County) - Interested in building a pharmacy and Outdoor Recreation Store
- (Owner of an oil company and restaurant) - Expressed possible interest in building a gas station and car wash
- Local Citizen from Knott County – Interest in building restaurant
- (Orthodonist in Hazard) - Interested in opening an Orthodonist Office and possibly building a home on site.
- Congregation interested in purchasing land to build a church
- Lawyer from Lexington KY – Interested in building a home

- (Previously owned a grocery store and son owned 70 Papa Johns then Huddle House now Ruby Tuesday) – Interest in building a Pizza and Arcade Restaurant

- (ARH Regional Medical Center) – expressed interest in opening a Sports Medicine Facility

- (Owner of GuestHouse in Hazard. Also owns a couple of outdoor malls) - Expressed interest in possibly opening a small outdoor mall or galleria.

- H&W – (Owns motel chains including Hilton, Marriott, Choice, Best Western, Intercontinental Hotels Group and Cendant brands) – Has visited the site and might be interested once sewer is in place and a few businesses and/or residents begin construction

- (Owns Car Dealership in Hazard) – Interest in possibly investing in Chestnut Mountain

We also have a list of about 20 other individuals who may be interested in purchasing a home at Chestnut Mountain in the future and have asked to be kept informed of the progress.

Debby Spencer
WMTH Corporation
P.O. Box 51153
Bowling Green, KY 42102
(270)792-5300 Cell
(270)781-6858 Work
Trailsrus.com

Western Pocahontas Properties

Limited Partnership

5260 Irwin Road
Huntington, WV 25705-3247
304-522-5757 • Fax 304-522-5401; 304-302-2370

November 30, 2009

NICK CARTER
President

Mr. Lew Warrix, Chairman
Troublesome Creek Environmental Authority
917 Perry Park Road
Hazard, Kentucky 41701

RE: Western Pocahontas Properties / Chestnut Mountain Development

Dear Mr. Warrix:

Western Pocahontas Properties has made a significant commitment – financially and otherwise – to developing a large tract of reclaimed coal mining property located on Kentucky Route 80 into marketable commercial and residential properties. As you are aware, this process has involved a coordinated effort between us, the Troublesome Creek Environmental Authority, Knott County Fiscal Court and others. We remain fully committed to this project.

We are aware that, at this time, the Troublesome Creek Environmental Authority is finalizing plans to construct a new sewer treatment plant and collection system that will serve not only the Chestnut Mountain Development, but a significant number of existing residential and commercial customers in the area as well. Public sewer services are critical to our project. Our development includes a total of 332 lots. At this point in time, all the preliminary earth work and initial site development is complete. In addition, we have completed preliminary engineering work associated with infrastructure for the project. Detailed design and engineering work is now underway to physically identify space for residential and commercial development as well as green space compatible with the overall vision for Chestnut Mountain. Before year end, we anticipate a signed agreement with the Knott County Youth Foundation that will allow development of a first class golf practice facility within Chestnut Mountain that will rival Man O War in Lexington, Ky. By the end of 2010, we anticipate an agreement to develop a community park surrounding a couple of existing ponds in Bolen Branch adjacent to the development.

Public water, fiber optics, underground electric and a curbed and guttered main access road is in place. The Knott County Sportsplex is already in operation and being utilized on a continuous basis but is in desperate need of permanent waste water treatment. While we have begun the process of identifying desirable components needed within the development, we have also begun negotiating with a key commercial facility needed for the development, only to be stalled because of no definitive commitment for waste water treatment. With the commitment that public sewer service will be available within the next year, we are confident our negotiations with this business will move forward and we will then be prepared to aggressively market our remaining properties. We feel confident in forecasting that within one year (from June 2010 through May 2011), we will have a minimum of 40 single family residential lots available for

sale and will aggressively open up a like number each year to meet demand. In that same context, we anticipate that we will have at least 40 commercial lots in the village center available for development that will complement our residential plans for Chestnut Mountain. We anticipate an aggressive marketing program that will continue until all of our residential and commercial lots have been sold.

This project is a viable one and a timely one for Knott County and the region but only if waste water treatment is made available.

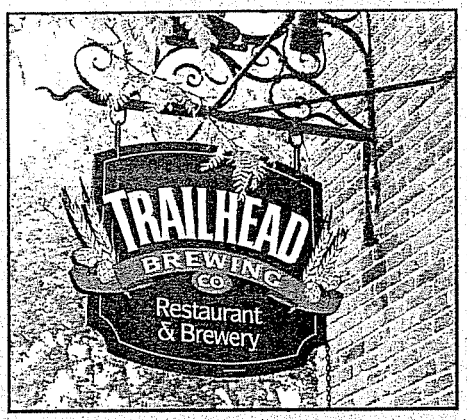
We look forward to working with you on this and any other project you may identify involving our properties in the future.

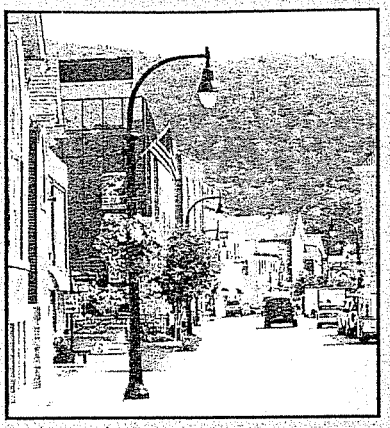
Sincerely,

Nick Carter

NC:JBC/db

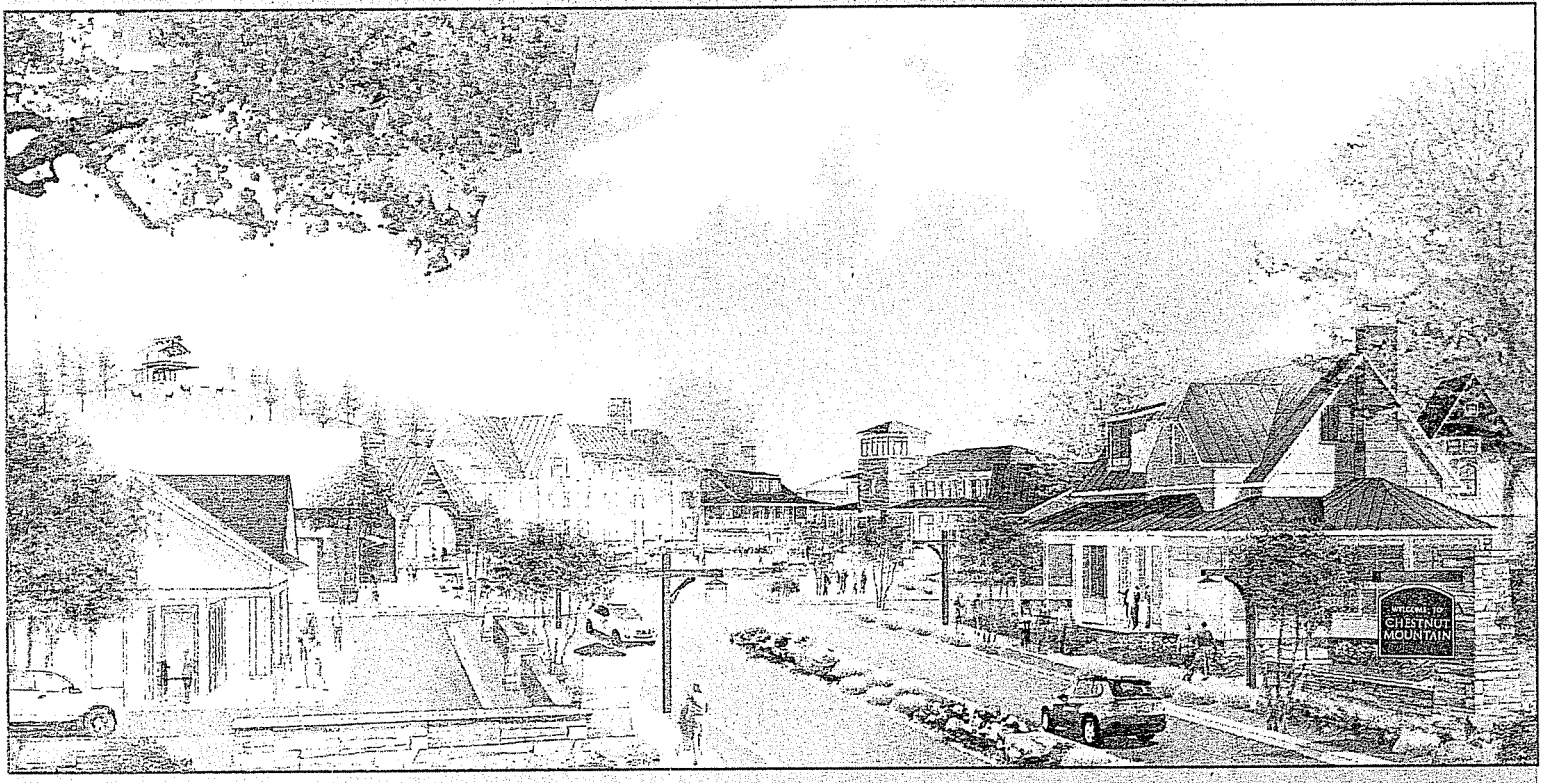
Cc: Knott County Judge Executive



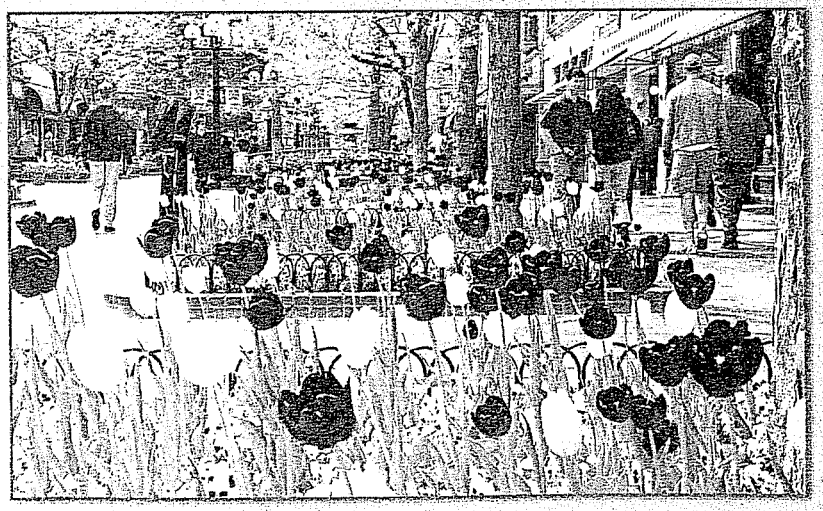


VILLAGE CHARACTER

urban informal practical

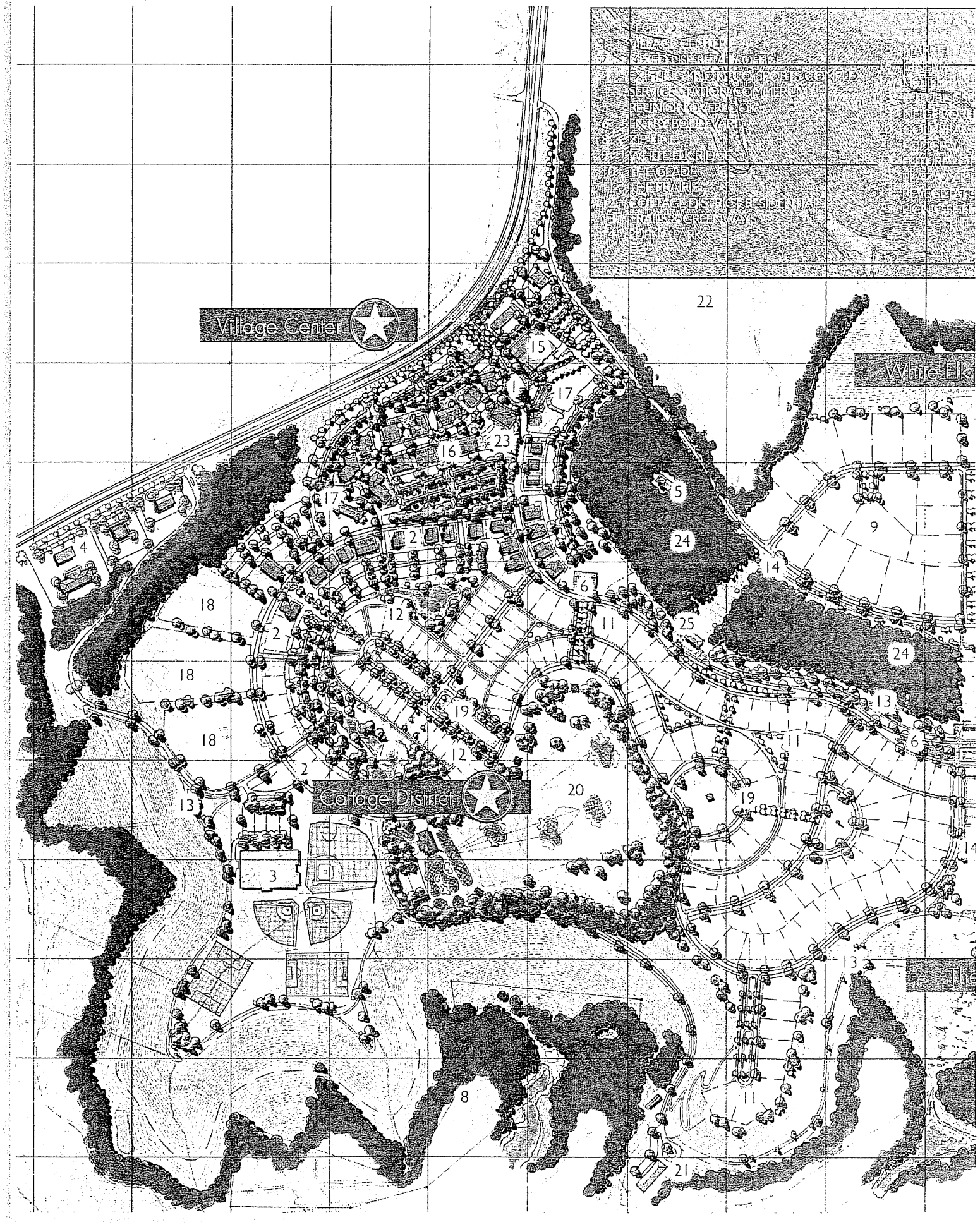


The vibrant VILLAGE CENTER will become the heart of the Chestnut Mountain community. Quaint, inviting buildings will give shape to "outdoor rooms" where family and friends interact and where visitors find a wide mix of products and services.

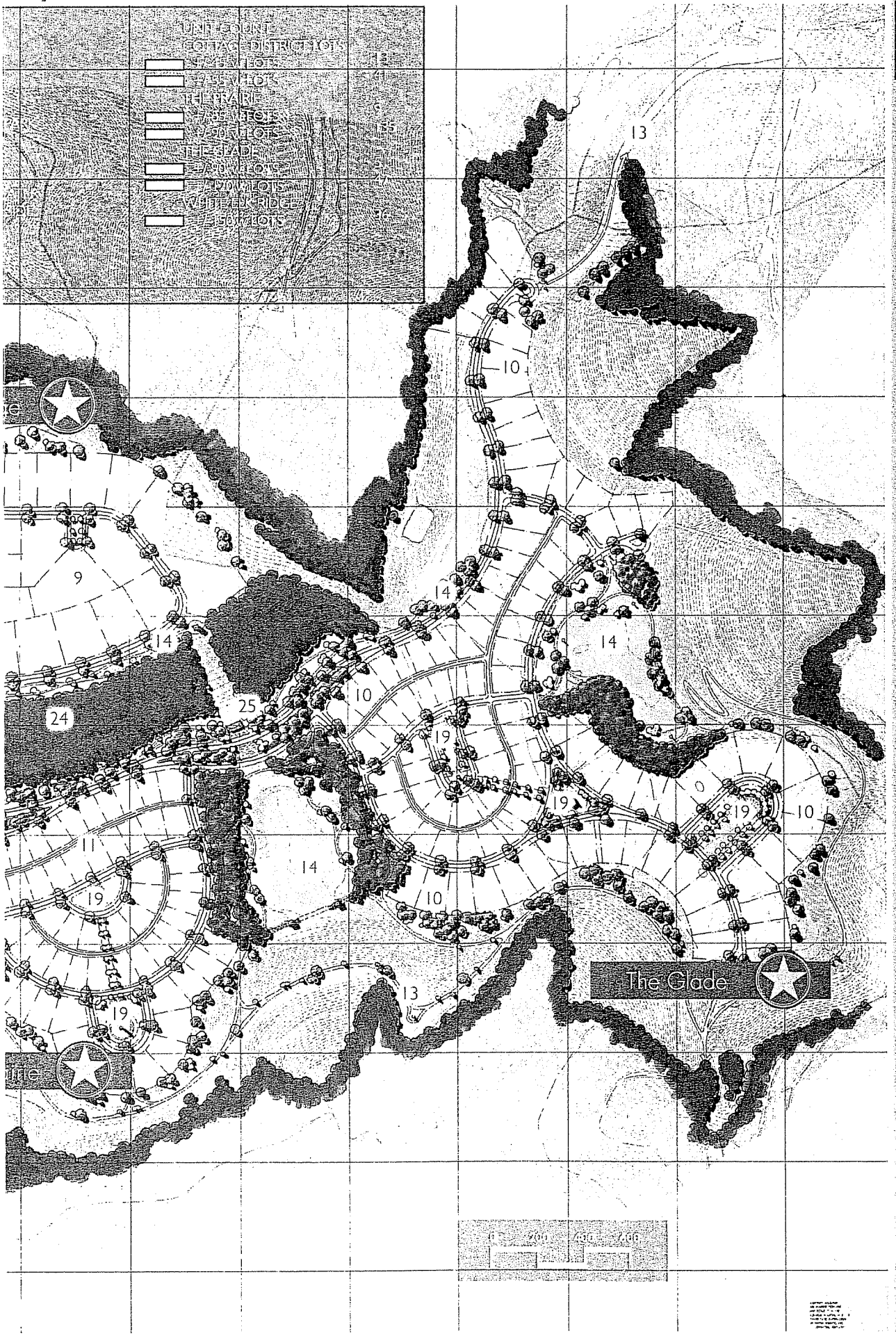


gathering spots

CHESTNUT MOUNTAIN -



e place to come back home.



Chestnut Mountain Development

A planned community for both residential and commercial

Variety of lot sizes

Within walking distance of Knott County Sportsplex

Future home of golf practice facility including driving range and both chipping & putting greens

Concept Plan Includes:

Greenways connecting homes to village, sports facilities & public parks

Bike paths

Walking paths

Nature trails

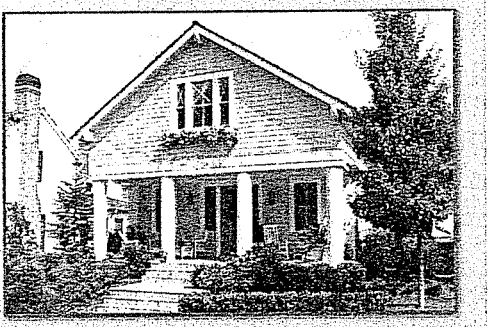
Picnic areas

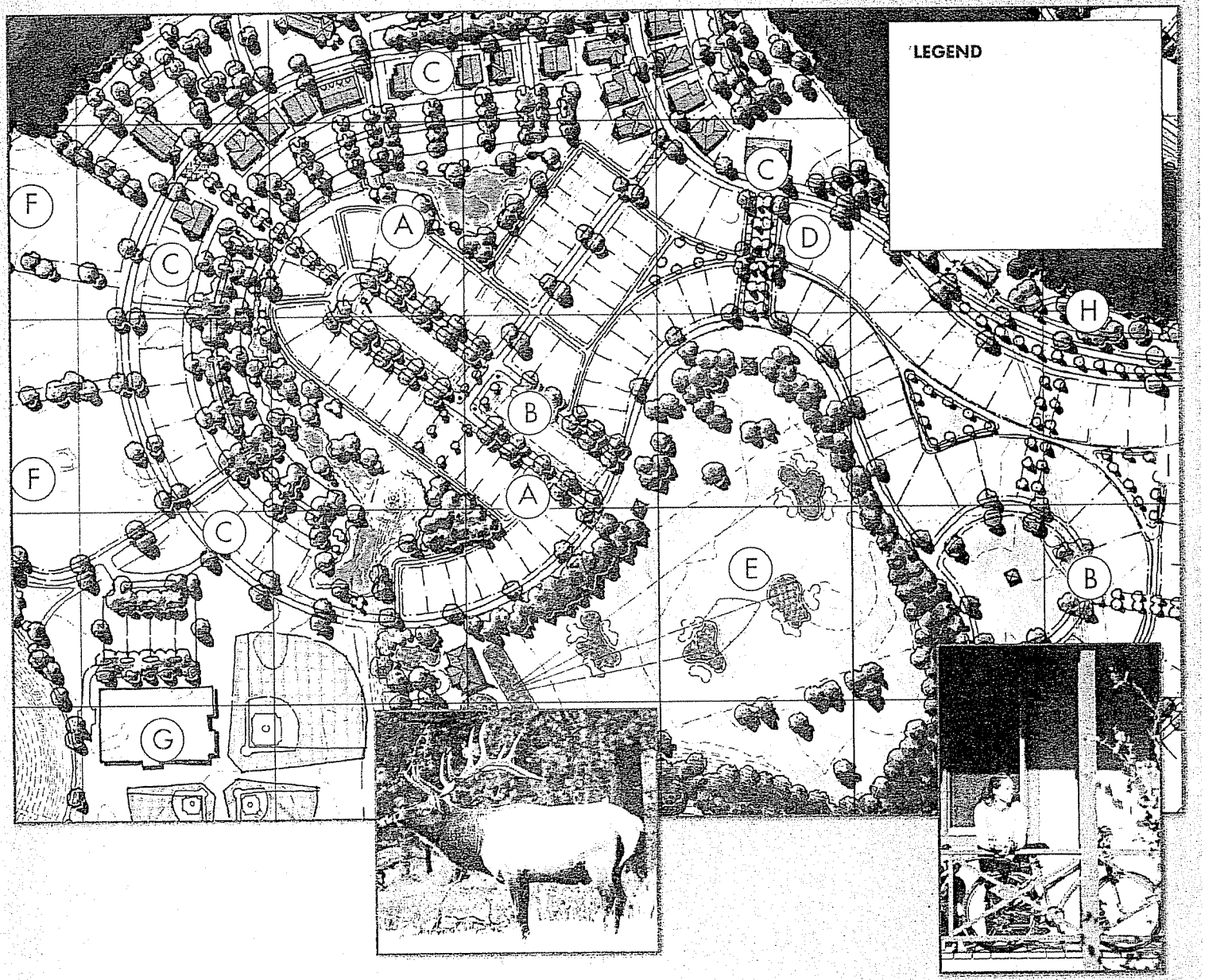
Outdoor Amphitheater

"A City in Itself"

COTTAGE DISTRICT

54 Lots
45' - 55' W x 120' ' D
0.12 - 0.15 acre lots
1-2 story product
detached, alley load garages
1,500 - 2,500 SF homes





Gwendolyn R. Christon
Isom IGA
PO Box 369
Isom, KY 41824

August 28, 2008

Judge Randy Thompson
Knott County Judge Executive
54 West Main Street
Hindman, KY 41822

Dear Judge Thompson:

As you know, I have committed to establishing a 4 Cinema Movie Theatre at Chestnut Mountain providing that development proceeds as planned. However, the planning for this Theatre is currently on hold as I wait for further development at the site (water, sewer, etc.).

The construction phase of this project has the potential to create around 20 construction/development jobs through local contract labor. This theatre also has the potential to provide around 25 jobs in the areas of management and general daily operations.

I have 30 years experience in the business industry and have owned and operated a thriving grocery store in Eastern Kentucky for the past 10 years. Based on this experience and personal interest in Knott County, I truly feel that Chestnut Mountain has the potential to make a significant economic impact in Knott County and surrounding areas.

Sincerely,

Gwendolyn R. Christon

Gwendolyn R. Christon

Cc: Debbie Spencer

McDonald's of East Kentucky
441 Second Street
Paintsville, Kentucky 41240
p: (606)789-7550
f: (606)789-9335

February 12, 2009

Judge Randy Thompson
Knott County Fiscal Court
54 West Main Street
Hindman, KY 41822

Dear Judge Thompson,

I am writing to you to express an interest in operating a McDonald's restaurant once the development of Chestnut Mountain is complete.

It is expected that once infrastructure is available the restaurant will be fully constructed within one year. Usually, engineering designs to date, estimated construction costs are $1.2 million. We also plan to purchase equipment and décor which will cost approximately $850,000.00 and hire forty (40) full-time and thirty (30) part-time employees at an average wage of *$7.50* per hour. The management team will consist of ten (10) individuals with annual pay rates ranging from *$20,000-$55,000* depending on the management position held.

As I mentioned before in our earlier meeting we look forward to working with you and becoming a more active part of Knott County.

Sincerely,

Bob Hutchison

Bob Hutchison

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE, 4TH FLOOR
FRANKFORT KENTUCKY 40601
www.kentucky.gov

October 30, 2009

Mr. Lewis Warrix
Troublesome Creek Environmental Authority
PO Box 444
Hindman, KY 41822

Re: Ball Creek Collection System
Knott County, Kentucky
Project ID: 09-0338
Ball Creek WWTP -- 101248
Activity ID: APE20090004

Dear Mr. Warrix:

In accordance with KRS Chapter 224.10-100 (19), the Energy and Environment Cabinet approves the Construction Permit Application for The Ball Creek Collection System dated August 11, 2009.

If we can be of any further assistance or should you wish to discuss this correspondence, please do not hesitate to contact me at 502/564-8158, extension 4924.

Sincerely,

Greg Goode, P.E.
Construction and Compliance Section
Surface Water Permits Branch
Division of Water

c: Knott County Health Department
Stephen R. Harris, P.E., R.M. Johnson Engineering
Plumbing

Attachment

Sewer Line Construction
Ball Creek WWTP
Facility Requirements

Activity ID No.: APE20090004

PORT0000000001 (Ball Creek WWTP) Ball Creek Collection System:

Submittal/Action Requirements:

Condition No.	Condition
S-1	When this system is completed, the applicant shall submit written certification: Due 30 calendar days after Completion of Construction to the Division of Water that the facilities have been constructed and tested in accordance with the approved plans and specifications and the above approval conditions. Such certification shall be signed by a registered professional engineer. Failure to certify may result in penalty assessment and/or future approvals being withheld. [401 KAR 5:005 Section 24(2)]

Narrative Requirements:

Condition No.	Condition
T-1	The plans and specifications submitted for the project are approved by the Environmental and Public Protection Cabinet as to sanitary features, subject to the requirements contained within the permit. [401 KAR 5:005 Section 24(4)(a)]
T-2	Authority to construct these sewers is hereby granted. This approval is issued under the provisions of KRS Chapter 224.10-100 (19) regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any permits or licenses required by this Cabinet and other state, federal, and local agencies. [401 KAR 5:005 Section 24(4)(a)]
T-3	The plans include approximately 4,522 linear feet of 8 inch PVC sanitary sewers, 27 residential grinder pumps, a lift station with 2 submersible grinder pumps of 45 gpm with 125 feet TDH and approximately 25,392.75 linear feet of 3 inch seamless HDPE force main rated at 160 psi. The flow from these lines is to be treated at the Ball Creek Wastewater Treatment Plant, KPDES Permit No. KY0107956, Knott County, Kentucky. [401 KAR 5:005 Section 24(4)(a)]
T-4	The types of sanitary sewer pipe shall be limited to the following: HDPE and PVC. [401 KAR 5:005 Section 1(2)]
T-5	The anticipated flow is 13,600 gpd. [401 KAR 5:005 Section 1(2)]
T-6	PVC pipe material and joints shall conform to ASTM D-3034, latest revision. [Ten States (WW) 33.81]
T-7	PVC pressure pipe material and joints shall conform to ASTM D-2241, or latest revision. [Ten States (WW) 33.81]
T-8	Flexible thermoplastic sewer pipe installation for gravity sewers shall conform to ASTM D2321, latest revision. [Ten States (WW) 33.81]

PORT0000000001 (continued):

Narrative Requirements:

Condition No.	Condition
T-9	Flexible thermoplastic sewer pipe installation for pressure sewers shall conform to ASTM D-2774, latest revision. [Ten States (WW) 33.81]
T-10	Ductile iron pipe used for gravity sewers shall conform to ASTM A-746-82, or latest revision. [Ten States (WW) 33.81]
T-11	Gravity sewer lines and force mains shall have a minimum of thirty (30) inches of cover or provide comparable protection. [401 KAR 5:005 Section 8(9)]
T-12	A drop pipe shall be provided where the sewer enters the manhole at two feet or more above the manhole invert. [Ten States (WW) 34.2]
T-13	All sewers shall be low pressure air tested. A deflection test shall be performed on all gravity sanitary sewers using flexible pipe. The test shall be performed after the final backfill has been in place for at least thirty days. No pipe shall exceed a deflection of five percent. If the deflection test is to be run using a rigid ball or mandrel, it shall have a diameter equal to 95% of the inside diameter of the pipe. The test shall be performed without mechanical pulling devices. Each new manhole shall be tested for watertightness. [401 KAR 5:005 Section 8(6)(a)]
T-14	If gravity sewer lines and force mains are to be constructed in fill areas, the fill areas shall be compacted to ninety-five (95) percent density as determined by the Standard Proctor Density test or to a minimum of ninety (90) percent density as determined by the Modified Proctor Density test prior to the installation of the sewer lines. [401 KAR 5:005 Section 8(10)]
T-15	Sewers crossing water mains shall be laid to provide a vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints are equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main. [Ten States (WW) 38.32]
T-16	Sewers shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured from edge to edge. Where this is impossible to achieve, pipe pressue shall be rated at a minimum of 160 psi and be constructed of seemless high density polyethylene pipe. [Ten States (WW) 38.32] . [Ten States (WW) 38.31]
T-17	Concrete anchors shall be provided, with a spacing not over thirty six (36) feet center to center, on all gravity sewer lines having a slope greater than twenty (20) percent and up to thirty five (35) percent. [Ten States (WW) 33.46]
T-18	The entrance of groundwater into, or loss of waste from, a new gravity sewer line shall be limited to 200 gpd per inch of diameter per mile of the gravity sewer line. This limitation includes manholes, gravity sewer lines, and appurtenances. [401 KAR 5:005 Section 8(5)]

PORT0000000001 (continued):

Narrative Requirements:

Condition No.	Condition
T-19	Air release valves shall be installed at high points in any proposed force main. [401 KAR 5:005 Section 8(19)]
T-20	The minimum slope for any proposed six (6) inch line shall be 0.6 percent. The recommended slope for this line is 1.0 percent. [Ten States (WW) 33.4]
T-21	Since the requirements of administrative regulations 401 KAR 4:050, Section 2 are met, a floodplain construction permit will not be required pursuant to KRS 151:250. [401 KAR 4:050 Section 2]
T-22	Requirements for Sewer Line Extensions. A simplex design shall be used only for pump stations which serve an individual residence or business and a spare pump shall be available for immediate installation. [401 KAR 5:005 Section 8(21)]
T-23	An audible and visible alarm shall be provided at any proposed wastewater pump station. [Ten States (WW) 45]
T-24	Requirements for Sewer Line Extensions. All proposed pump station wetwells shall be sized such that, based on the average flow, the time to fill the wetwell from the pump-off elevation to the pump-on elevation shall not exceed thirty (30) minutes. [401 KAR 5:005 Section 8(16)]
T-25	Adequate thrust blocks shall be provided at all significant bends in any proposed sewer force main in order to prevent movement. [Ten States (WW) 48.4]
T-26	The integrity of any proposed force main shall be verified by leakage tests. The applicant shall describe the proposed testing methods and leakage limits in the specifications submitted with the permit application. [401 KAR 5:005 Section 8(6)(b)]
T-27	If the sewer line project will cross a stream or wetland contact the Water Quality Branch, 401 Certification Section at 502-564-3410. [KRS 224.16-050]
T-28	Facilities shall be designed in accordance with the "Recommended Standards for Wastewater Facilities" of the Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers, commonly referred to as "Ten States' Standards", 1990 edition. [401 KAR 5:005 Section 7(1)(a)]
T-29	The permit is issued to the applicant and the permittee shall remain the responsible party for compliance with all applicable statutes and administrative regulations until a notarized applicable change in ownership certification is submitted and the transfer of ownership is acknowledged by the cabinet. [401 KAR 5:005 Section 24(3)]
T-30	There shall be no deviations from the plans and specifications submitted with the application or the conditions specified unless authorized in writing by the cabinet. [401 KAR 5:005 Section 24(4)(b)1]

PORT0000000001 (continued):

Narrative Requirements:

Condition No.	Condition
T-31	The issuance of a permit by the cabinet does not convey any property rights of any kind or any exclusive privilege. [401 KAR 5:005 Section 24(6)]
T-32	A permit to construct a facility shall be effective upon issuance unless otherwise conditioned. Construction shall be completed within twelve (12) months unless additional time is requested. If construction is not commenced within the twelve (12) months following a permit's issuance, a new permit shall be obtained before construction may begin. The cabinet may allow a single twelve (12) month extension to begin construction if site conditions have not changed. [401 KAR 5:005 Section 24(1)]
T-33	The Construction Permit is effective on October 30, 2009 and expires on October 30, 2010. [401 KAR 5:005 Section 24(1)]

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE, 4TH FLOOR
FRANKFORT KENTUCKY 40601
www.kentucky.gov

October 30, 2009

Mr. Lewis Warrix
917 Perry Park Rd
Hazard, KY 41701

Re: Ball Creek SBR WWTP
Knott County, Kentucky
Project ID: 09-0333
Ball Creek WWTP -- 101248
Activity ID: APE20090003

Dear Mr. Warrix:

In accordance with KRS Chapter 224.10-100 (19), the Energy and Environment Cabinet approves the Construction Permit Application for the Ball Creek SBR WWTP dated August 11, 2009.

If we can be of any further assistance or should you wish to discuss this correspondence, please do not hesitate to contact me at 502/564-8158, extension 4924.

Sincerely,

Greg Goode, P.E.
Construction and Compliance Section
Surface Water Permits Branch
Division of Water

c: Knott County Health Department
Stephen R. Harris, P.E., R.M. Johnson Engineering

Attachment

Wastewater Treatment Plant Construction

Ball Creek WWTP
Facility Requirements

Activity ID No.: APE20090003

TRMT0000000001 (Ball Creek WWTP) Ball Creek WWTP:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Ammonia Nitrogen, Total (as]	Effluent: Ammonia Nitrogen, Total (as N) <= 4 mg/L. [401 KAR 10:031 Section 4] This requirement is applicable during the following months: May - October. Statistical basis: Monthly average (AV).
L-2	Ammonia Nitrogen, Total (as]	Effluent: Ammonia Nitrogen, Total (as N) <=_ mg/L. [401 KAR 10:031 Section 4] This requirement is applicable during the following months: November - April. Statistical basis: Monthly average (AV).
L-3	BOD, Carbonaceous 05 Day, 2	Effluent: BOD, Carbonaceous 05 Day, 20C <= 10 mg/L. [401 KAR 5:045 Section 3] This requirement is applicable during the following months: All Year. Statistical basis: Monthly average (AV).
L-4	Flow, In Conduit Or Thru Trea	The design capacity of the WWTP is based on the following: Flow, In Conduit Or Thru Treatment Plant <= 0.1 MGD (MA). [401 KAR 5:005 Section 24(4)(a)] This requirement is applicable during the following months: All Year. Statistical basis: Daily average.
L-5	Oxygen, Dissolved	Effluent: Oxygen, Dissolved >= 7 mg/L. [401 KAR 10:031 Section 4] This requirement is applicable during the following months: All Year. Statistical basis: Monthly average (AV).
L-6	Solids, Total Suspended (TSS)	Effluent: Solids, Total Suspended <= 30 mg/l. [401 KAR 5:045 Section 3] This requirement is applicable during the following months: All Year. Statistical basis: Monthly average (AV).

Submittal/Action Requirements:

Condition No.	Condition
S-1	When the construction of the system is completed, the permittee shall submit written certification: Due 30 calendar days after Completion of Construction to the Division of Water that the facilities have been constructed and tested in accordance with the approved plans and specifications and the above approval conditions. Such certification shall be signed by a registered professional engineer. Failure to certify may result in penalty assessment and/or future approvals being withheld. [401 KAR 5:005 Section 24(2)]

TRMT0000000001 (continued):

Narrative Requirements:

Phosphorus:

Condition No.	Condition
T-1	Phosphorus: Effluent:Phosphorus effluent monitoring is required as a condition of this construction application approval. [401 KAR 10:031 Section 1]

Condition No.	Condition
T-2	Facilities, except extended aeration package WWTPs with an average daily design capacity less than 100,000 gpd, shall be designed in accordance with the "Recommended Standards for Wastewater Facilities" of the Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers, commonly referred to as "Ten States' Standards", 1990 edition. [401 KAR 5:005 Section 7(1)(a)]
T-3	The permit is issued to the applicant and the permittee shall remain the responsible party for compliance with all applicable statutes and administrative regulations until a notarized applicable change in ownership certification is submitted and the transfer of ownership is acknowledged by the cabinet. [401 KAR 5:005 Section 24(3)]
T-4	Construction is limited to the following: A 0.1 MGD sequence batch reactor (SBR) treatment plant with the following treatment units: 1 electromagnetic plant influent flow meter, 1 manually cleaned bar screen , 1 comminutor, 2 SBR basins, [401 KAR 5:005 Section 1]
T-5	There shall be no deviations from the plans and specifications submitted with the application or the conditions specified unless authorized in writing by the cabinet. [401 KAR 5:005 Section 24(4)(b)1]
T-6	The issuance of a permit by the cabinet does not convey any property rights of any kind or any exclusive privilege. [401 KAR 5:005 Section 24(6)]
T-7	All rights of inspection by representatives of the Division of Water are reserved. [401 KAR 5:005 Section 24(4)(a)]
T-8	This wastewater treatment plant has been designed to meet a reliability category grade 3. [401 KAR 5:005 Section 13]
T-9	A water supply with suitable backflow preventer shall be provided to facilitate cleaning and maintenance of the wastewater treatment plant. [401 KAR 5:005 Section 10(6)]
T-10	Fencing and/or other adequate protection shall be provided around the wastewater treatment plant. [401 KAR 5:005 Section 10(7)]

TRMT0000000001 (continued):

Narrative Requirements:

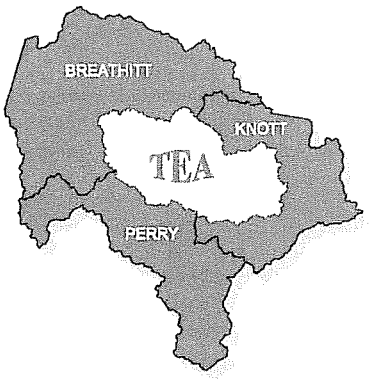
Condition No.	Condition
T-11	An all-weather access road shall be provided to the wastewater treatment plant. [401 KAR 5:005 Section 10(8)]
T-12	Water quality standards govern the treatment requirements; the following standards apply: a. Dissolved Oxygen in the stream; 5 mg/l or higher. b. Un-ionized Ammonia in the stream; 0.05 mg/l or less. [401 KAR 10:031 Section 4]
T-13	The permittee shall ensure that the effluent is of satisfactory quality to prevent violations of the standards in 401 KAR Chapter 5. If violations of the standards of 401 KAR Chapter 5 result from the discharge of the treated effluent, the owner shall provide additional treatment or an extension of the effluent line. [401 KAR 5:005 Section 24(4)(c)1]
T-14	Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Division of Water and other state, federal, and local agencies. [401 KAR 5:005 Section 24(4)(c)3]
T-15	The effluent from this treatment system is to be discharged at the mile point of 0.1 of Knob Bottom Branch. [401 KAR 5:005 Section 1(2)]
T-16	Additional effluent limitations and water quality standards are contained in the Division of Water Regulations. [401 KAR 5:005 Section 24(4)(a)]
T-17	The division will review the reported monthly flows and organic loads for the most recent twelve (12) months for the Wastewater Treatment Plant (WWTP). If the annual average flow or organic loads exceed ninety (90) percent of the WWTP's design capacity, the division may deny the approval of any sewer line extension until the owner of the WWTP commits to address the potential overload condition. [401 KAR 5:005 Section 9]
T-18	A permit to construct a facility shall be effective upon issuance unless otherwise conditioned. Construction shall be completed within twelve (12) months unless additional time is requested. If construction is not commenced within the twelve (12) months following a permit's issuance, a new permit shall be obtained before construction may begin. The cabinet may allow a single twelve (12) month extension to begin construction if site conditions have not changed. [401 KAR 5:005 Section 24(1)]
T-19	The Construction Permit is effective on October 30, 2009 and expires on October 30, 2010. [401 KAR 5:005 Section 24(1)]

PRELIMINARY DESIGN SUMMARY

FOR

BALL CREEK WWTP & SEWER COLLECTION PROJECT

PREPARED FOR:



TroublesomeCreek
ENVIRONMENTAL AUTHORITY

SUBMITTED BY:

R.M. JOHNSON ENGINEERING, INC.
P.O. Box 444
Hindman, KY 41822

April 16, 2009

Table of Contents

Appendices

I. Project Background & Purpose

In August of 2006 the Troublesome Creek Environmental Authority (TEA) was formed by the Judge Executives of Knott, Perry, and Breathitt Counties. TEA's primary goal is to cooperate with the founding counties in effecting and maintaining high water quality in their shared resource, Troublesome Creek. The Troublesome Creek watershed is approximately 246 square miles, or 157,440 acres, and covers the central portion of Knott County, the northeastern portion of Perry County, and the southeastern portion of Breathitt County. Troublesome Creek empties directly into the North Fork of the Kentucky River at Haddix, KY. The major creeks that discharge into Troublesome Creek are Lost Creek, Buckhorn Creek, and Balls Fork (otherwise known as Ball Creek). This project is the first proposal submitted by TEA and offers to provide public sanitary sewer services beginning at the headwaters of the Troublesome Creek watershed **(See Appendix 'A')**.

The project will consist of the construction and installation of more than 30,000 linear feet of force main and gravity sewers, a 100,000 gallon per day (GPD) Wastewater Treatment Plant (WWTP), a regional lift station, and approximately 45 residential grinder stations in the Ball Creek area of Knott County **(See Cost Estimate, Appendix 'C').** The purposes of this project are:

1) To construct a public sewer system capable of accepting present-day sewer flows,
2) To eliminate existing straight pipe discharges into Ball Creek,
3) To eliminate stream contamination from failing or inadequate septic tanks, and
4) To stimulate the residential and commercial development potential at a nearby development site.

Currently there are no active regional WWTPs within the Ball Creek area of Knott County. In fact, there are only two local treatment facilities within the entire boundary of Knott County. One serves the residents of Hindman and is owned and operated by the City of Hindman. This plant in near or at capacity and experiences a high volume of flow during storm events due to infiltration and inflow (I/I). The other plant is located in Pippa Passes and serves the residents of the City of Pippa Passes and Alice Lloyd College. This plant is located within the Big Sandy watershed as opposed to the Troublesome Creek watershed. The plant is owned and operated by the Knott County Water & Sewer District and also experiences a high volume of I/I during storm events. There is a small package plant located at the abandoned Beckham Combs Elementary School located within the Ball Creek watershed. We have looked at the feasibility of expanding this plant's capacity to be able to accept the present and future flows, but have determined it more economical to construct a new plant.

PRIDE has identified 189 straight pipe discharges or failing septic systems within the Troublesome Creek watershed with approximately 40 discharges located within the Ball Creek watershed. Removing these 40 point-source contaminations will eliminate the discharge of roughly 33 pounds of solids per day, nearly 1,000 lbs per month and more than 12,000 lbs per year, from entering the stream of Ball Creek.

Local health departments are encountering increasing difficulties in selecting adequate sites for residential and commercial septic systems due to the decreasing availability of land coupled with expanding populations. The terrain in eastern Kentucky is mountainous and often development occurs on small semi-level lots located near the streams. As the population has increased these semi-level lots have become less and less available making it very difficult to design underground septic tanks and leaching beds. Mr. Jeffrey Cornett, Environmental Director of the Kentucky River District Health Department submitted a letter of support for the Ball Creek WWTP & Sewer Collection Project in December of 2008. His letter summarizes some of the problems they encounter on a daily basis in the eastern Kentucky region **(See Appendix 'E').**

At the headwaters of Ball Creek, which is also the beginning of the proposed sewer project, is a large 400+ acre proposed residential/commercial development site. This site, known as the Chestnut Ridge Development, is a large mountaintop removal reclamation site and is currently home to the Knott County Sportsplex. The owners of the property are currently working through a Master Plan that will include the development and construction of approximately 335 residential homes and nearly 75 acres of commercial property. This development could be very significant in offsetting the effects of the current poor economy. Several businesses have expressed interest in purchasing and developing a site upon the availability of public sewer services. The completion of the Ball Creek WWTP & Sewer Collection Project will provide just that, public sewer services to the Chestnut Ridge Development Site. This could stimulate the number of residential and commercial developments that take place within the very near future and could have a very large economic impact throughout Knott County and the surrounding region.

The proposed 100,000 GPD Ball Creek WWTP will have to be expanded as needed to accommodate the amount and speed of the development. The total projected future flows at 100% build-out are approximately ,000 GPD. We foresee expanding the proposed Ball Creek WWTP with five (5) expansions at 100,000 GPD each and the final expansion being 40,000 GPD. This will make the total capacity, of the future WWTP, 640,000 GPD and provides 10% volume for future I/I.

II. Current & Projected Wastewater Flows

CURRENT WASTEWATER FLOWS

The Ball Creek WWTP & Sewer Collection Project will be designed to accept the wastewater flow from approximately 85 existing residential customers, 10 existing commercial customers, and the Knott County Sportsplex. The total flow from the existing potential customers is calculated below:

Anticipated Average Daily Wastewater Flow

85 Existing Residents @ 400 GPD	=	*34,000 GPD*
10 Existing Commercial Units @ 1,000 GPD	=	*10,000 GPD*
Knott County Sportsplex @ 1,000 GPD	=	*1,000 GPD*
Subtotal	=	*45,000 GPD*
Future I/I @ 10 %	=	*4,500 GPD*
Total	=	***49,500 GPD***

WWTP Design Flows

Average Daily Flow	=	*49,500 GPD*
Peaking Factor	=	*4.0*
Peak Daily Flow	=	*137.5 GPM*

With an average daily flow of 49,500 GPD the minimum plant capacity required to treat the wastewater is 55,000 GPD (49500 GPD / 0.90). Since some new developments are set to take place once public sewer is available we are proposing to construct a 100,000 GPD WWTP. This will give us a maximum average flow capacity of 90,000 GPD before a WWTP expansion is necessary. This produces approximately 40,500 GPD in excess capacity and allows for the near-future development. This additional capacity could accept the sewerage from 15 new commercial units and nearly 65 new residential developments before a treatment plant expansion is necessary.

PROJECTED WASTEWATER FLOWS

According to the U.S. Census the population of Knott County has been declining slowly since at least 1990. However, we are going to assume that in 20 years we are going to experience a complete build-out at the Chestnut Ridge Development. This assumption adds a tremendous amount of flow to the system with 335 new residential developments and 75 acres of commercial property fully

developed. In 20 years we also foresee an expansion of the Ball Creek Collection System to serve all residents in the Ball Creek area of Knott County. This will add approximately 550 existing homes into the system. The total future projected wastewater flows are estimated as:

Projected Future Average Daily Wastewater Flow

635 Existing Residents @ 400 GPD	=	*254,000 GPD*
Existing Commercial Units @ 1,000 GPD	=	*10,000 GPD*
Knott County Sportsplex @ 1,000 GPD	=	*1,000 GPD*
335 Chestnut Ridge Residential @ 400 GPD	=	*283,800 GPD*
75 Acres of Commercial Development @2,000 GPD	=	*150,000 GPD*
Subtotal	=	*698,800 GPD*
Future I/I @ 10 %	=	*69,880 GPD*
Total	=	***768,680 GPD***

An average daily flow of 768,680 GPD would require a plant with a minimum capacity of 855,000 GPD. The Ball Creek SBR WWTP will have to be expanded as needed to accommodate the development within the sewershed. The current plant design is a Sequential Batch Reactor (SBR) and can be operated to a maximum influent flow of 300,000 GPD simply by changing the operations of the plant. Once flow surpasses this 300,000 GPD expansions will be necessary to treat the flow. Each expansion will be designed in accordance with all applicable federal, state, and local regulations.

III. Ball Creek WWTP Effluent Limits

A High Quality Water Alternative Analysis (HQAA) was submitted for the Ball Creek WWTP to the Kentucky Division of Water in June of 2008. After several iterations the HQAA was reviewed and effluent limits were awarded **(See Appendix 'D').** The proposed Ball Creek SBR WWTP will be designed to meet or exceed the following limits as mandated by the Kentucky Division of Water:

	May 1 – October 31	**November 1 – April 30**
$CBOD_5$	*10 mg/l*	*10 mg/l*
Total Suspended Solids, TSS	*30 mg/l*	*30 mg/l*
Ammonia Nitrogen, NH_4-N	*4 mg/l*	*10 mg/l*
Dissolved Oxygen, DO	*7 mg/l*	*7 mg/l*
Total Residual Chlorine	*0.011 mg/l*	*0.011 mg/l*
Total Phosphorus	*Monitor*	*Monitor*
Total Nitrogen	*Monitor*	*Monitor*
Reliability Classification = Grade 3		

IV. Ball Creek SBR WWTP & Process Design Data

The first phase of the Ball Creek WWTP & Sewer Collection Project will include the construction of a 100,000 GPD Sequential Batch Reactor (SBR) WWTP. An SBR has five steps that are carried out in sequence; they are fill, react, settle, draw, and idle. **Appendix 'F'** displays several existing SBRs throughout the United States. A major advantage of the SBR WWTP is that is can easily be expanded while occupying a small footprint. Our proposed site is a long, narrow area that is restricted in width by an existing stream and mountainside **(See Appendix 'B').**

Other advantages of the SBR Process are:

- High quality effluent consistently achieved at widely varying flows,
- No primary or secondary clarifiers which reduces space requirements and fewer mechanical parts means less maintenance,
- No sludge recycling, decrease capital and O&M costs,
- Odor control is not necessary,
- Simultaneous Nitrification/Denitrification is inherent to process control system without extra equipment,
- Phosphorus biologically removed,
- Improved settling provided under perfect quiescent conditions,
- Reduced labor costs through automated controls,
- Power savings due to lower oxygen requirements,
- Decanter eliminates solids infiltration into the effluent,
- Acclimated biomass stabilization under shock BOD loads and large flow variations, and
- Heat conservation optimizes winter operation.

SBR TREATMENT PROCESSES

During ***Anoxic Fill***, the basin is loaded with food from the influent through a influent distribution manifold which creates a high food to microorganism (F/M) ratio with zero dissolved oxygen (DO) conditions. The fill period is primarily anoxic, or without aeration. Aeration is usually initiated late in the Fill period, and continues in the React period, after the influent flow has been diverted to another basin. The influent manifold allows intimate contact of the influent (food) with the settled biomass in the sludge blanket throughout the length of the basin. During this time, the soluble BOD is absorbed and stored by the facultative biomass until air is received to metabolize the food. The selective pressures exhibited on the biomass of zero DO in Anoxic Fill allows good settling, facultative organisms to predominate.

After about 75% of the fill period is complete, the blowers and pumps are automatically turned on to provide air and complete mixing which initiates the "feast" environment for the biomass. The biomass begins to metabolize the food they have absorbed. They utilize the oxygen provided very rapidly with high DO uptake rate and low residual DO values. It is during the initial stages of ***Aerated Fill*** that both Nitrification and Denitrification occur. The ammonia is converted to nitrates within the highly aerated plume of the jet. The nitrates are converted to nitrogen gas in the low DO areas of the basin. The denitrifying organisms use the BOD as a food source and the oxygen off the nitrates converting the nitrates to nitrogen gas.

React begins after the basin has completed filling, and the influent flow has been diverted to another SBR tank. No more food (influent) enters the reactor basin during React. This forces the organisms to scour for any remaining BOD. Aeration continues in the full reactor until complete biodegradation is achieved; mixed liquor is drawn through the manifold and used as motive liquid for the aerator. React continues until the food is consumed and the biomass enters its "famine" state. True react is critical to achieve intense famine conditions for optimum organism selection. Tests have shown that the food is consumed when the residual DO begin to rise quickly.

The biomass is allowed to ***settle*** in perfect quiescent conditions; no influent is introduced during settle and no effluent is decanted. Since the reactor is under true quiescent conditions during settle, 100% of the reactor capacity is available for liquid/solids separation. The relative loading rate during clarification is zero for the batch reactor.

Following the Settle cycle the effluent withdrawal or ***Decant*** cycle begins. Decant is initiated by opening an automatic valve. Treated effluent is discharged through a decanter from approximately 18

inches below the surface, avoiding discharge of any surface contaminates. Decant continues until approximately the upper 1/3 of the basin is discharged.

While the reactor waits in ***idle*** to receive flow, settle sludge is drawing through the manifold and pumped to the digester. The jet motive liquid pump is utilized as a waste sludge pump. The settled sludge is withdrawn through the sludge collection manifold, which runs the length of the basin. The multi-point sludge withdrawal yields the thickest sludge possible, reducing side stream sludge treatment operation and maintenance.

INFLUENT SCREENING

Coarse screens will not be necessary since all solids will have been processed by a grinder station prior to arriving at the Ball Creek WWTP. There will be two fine screens designed for this project; each will be capable of handling a peak instantaneous flow of approximately 140 GPM. We are proposing to install the Auger Monster Modular Headworks System. This wastewater screen serves as a grinder, fine screen, and a compactor. First, a grinder shreds all clumps of rags and long stringy material. Next, the solids are captured by a perforated plate screen and removed by a rotating auger. As the solids are removed, dual wash water zones clean-off fecal material. The rotating auger then conveys solids to the discharge point where the integrated compactor squeezes out water before depositing the cleaned and dried material into a dumpster. The cleaner discharge keeps odors to a minimum and lowers disposal costs, as less water and fecal material are sent to the landfill. A bypass will also be installed with manually screened bar screens.

ULTRAVIOLET DISINFECTION

Disinfection of the effluent will be provided as necessary to meet the Wasteload Allocation appointed to this project by the Kentucky Division of Water. We are proposing to use the TrojanUV3000™PTP. The TrojanUV3000™PTP is ideally suited to treat flows up to 1.4 MGD. Designed as a generic type of UV disinfection unit, the Trojan Package Treatment Plant (PTP) is very price competitive and offers an "off-the-shelf" solution for operators with limited budgets and limited treatment requirements. The system uses low-pressure, low-output lamps.

POST AERATION

Post Aeration with a concrete basin, blowers, and diffusers will be provided to assure that a safe and habitable level of oxygen in available in the final effluent prior to discharging into Knob Bottom Branch.

SLUDGE HANDLING

The resulting volume of sludge will be processed by a transportable sludge dewatering container with media fabric and chemical polymer system. We initially looked at processing the sludge with drying beds and decided that due to the location of the plant, located in a hollow, the amount of sunlight may not be sufficient. The transportable dewatering container is a dewatering system that removes moisture from the sludge and produces a cake that can easily be transported from the site by truck.

The consistent slurry from the sludge source is pulled to the dewatering system by a control panel adjustable positive displacement pump. The feed pump is used to meter the slurry at a consistent rate to the press. Polymer is diluted in the feed/blend system to approximately 0.2 – 1.0% with water then injected after the feed pump but prior to the pneumatic adjustable mix valve, into the required polymer/slurry mixing energy for the optimum floc formation. As the slurry is pushed by the feed pump through the retention piping, it is given time to thoroughly mix to flocculate a slurry before it reaches the press. The operator has the option to open the slurry by-pass valve which allows for the slurry to be sent back to the process source until the proper floc formation is reached. Once proper floc formation is reached, the press feed valves can be opened, sending the slurry to the Rotary Fan Press.

The cake will be transported by truck as needed to an approved land fill. Alternative sludge land uses will be researched to determine if the sludge can be applied for some environmentally enhancing benefit.

PROCESS DESIGN DATA FOR BALL CREEK SBR WWTP

A. Design Parameters

• Design Flow Q_{AVG}	100,000 GPD
• Peak Flow Q_{AVG}	300,000 GPD
• Future Peak Instantaneous	2.3 MGD
• COD to SBR	500 mg/l total (assumed)
• COD Removed	375 lbs/day
• BOD to SBR	250 lbs/day
• Effluent BOD	< 10 mg/l
• BOD Removed	204 lbs/day
• TSS to SBR	209 lbs/day
• Effluent TSS	< 15 mg/l
• Influent TDS	500 mg/l
• Influent NH4-N	25 lbs/day
• Influent TKN	38 lbs/day
• Effluent NH3-N	< 4.0 mg/l
• Influent Phosphorus	6 lbs/day
• Effluent Phosphorus	< 2.0 mg/l

B. Process Parameters

• Average COD Removed	375 lbs/day
• Maximum COD Removed	584 lbs/day
• Average Biosolids Yield	94 lbs/day
• Average Net Sludge Yield	174 lbs/day
• Maximum Sludge Yield	226 lbs/day
• Required Aerobic Mass	1,333 MLSS
• Aerated Portion of Cycle	50 %
• Required total SBR volume	0.11 MGD

C. SBR Basin Design (Rectangular Basins)

• Number of SBR Basins	2
• Length/Width Ratio	1.0:1
• Length	20 ft
• Width	20 ft
• TWL at Design Average Flow	18 ft
• Total Volume in SBRs	0.11 MGD
• Total Retention Time in SBR	26.5 hours

D. Oxygen Requirement

• Design AOR	421 lbs. O2/day
• Standard Oxygen Required, SOR	666 lbs. O2/day

E. Process Design

• No. of batches/day/SBR	4.0 per SBR
• Maximum Fill Time	3.0 hrs. per basin
• Complete Cycle Time	6.0 hrs. per basin
• Fill Time at Design Flow	3.0 hrs. per basin
• Anoxic Fill Time	1.5 hrs.
• Aerated Fill Time	1.5 hrs.
• React Time	1.5 hrs.
• Settle Time	0.75 hrs.
• Decant Time	0.40 hrs.
• Idle Time	0.35 hrs

F. Aeration System Design

• Aeration elevation	1.5 ft
• Nozzle Cant	0 degrees
• Average Aerator Submergence	16.0 ft
• Total Aeration Time	3.0 hrs/cycle
• SOR for Aeration Design	28 lbs/hr/basin
• Design Gassing Rate	36.3 SCFM/jet
• Site Gassing Rate	36.5 SCFM/jet
• Absorption Efficiency	24.7 %
• Design Air Flow	109 SCFM
• Jets required per basin	3 Model 40 Jets
• Jet Header per basin	1 Type C, Orientation L
• Jets per Header	3 Model 40 Jets

G. Blower Design Calculations

• Operating Blowers	1 per aerating basin
• Type of Blowers	Rotary, pos. displacement
• Total Number of Blowers	2 including spare
• Air flow per blower	109 SCFM
• Net Inlet Pressure	13.99 psia
• Static Head + Aerator Loss	7.02 psig

- Total Discharge Pressure 8.02 psig
- Design ambient temperature 100 ° F
- Site air flow required 121 ICFM average
- Equiv. sea level pressure 8.83 psig
- Nominal Blower Efficiency 55 %
- BHp per Blower 6.4 BHp/Blower
- Blower BHp/Aerating Basin 6.4 BHp/Basin

H. Pump Design Calculations

- Number of Pumps 1 per basin
- Type of Pumps Submersible Centrifugal
- Total number of Pumps 2
- Flow per Pump 549 GPM
- Required Jet Head 17.0 ft
- System Headlosses 1.0 ft (assumed)
- Total Pump Head 18.0 ft
- Assumed Pump Efficiency 68 %
- BHp per Pump 3.7 BHp/Pump
- Total pump BHp/Basin 3.7 BHp/Basin

I. Aeration System Summary

- Standard Oxygen Requirement 666 lbs/day
- Average BHp for 24 hrs. 10 BHp
- Assume Cost of Power 0.07 $/kW
- Max. Annual Cost of Power $5,108.60/Yr

J. Decanter Sizing

- Cycles per day 8
- Volume per decant 12,500 Gal @ Design Flow
- Decant Time 0.40 hrs
- Average Decant Flow 521 GPM

V. Easements & Rights-Of-Way

All public components of the proposed sewer project will be constructed on public right-of-way currently held by either the Kentucky Transportation Cabinet (KYTC) or the Knott County Fiscal Court. An encroachment permit from the KYTC will be required before any construction activities can begin. A blanket easement will be secured from the Knott County Fiscal Court prior to work commencing on this project.

The proposed Ball Creek WWTP site is located at Knob Bottom and is currently owned by CONSOL of Kentucky, a local mining company. An option agreement has been secured that states, once approval of the site by the engineer has occurred, the TEA will purchase the surface rights to construct the WWTP. This site will include approximately 2.0 acres and is of sufficient size for all foreseeable future expansions.

Most of the project will be a low-pressure sewer system (LPSS) and will require the installation of residential grinder stations at all residential and/or commercial connections. Once an easement for access has been secured from the private owner we will install the residential grinder stations on private property. The private owner will be responsible for all plumbing connections from the structure to the pump. Electrical service will be provided by connecting to the private owner's existing power service supply. We will ensure that all easements, rights, etc. are secured before any work is performed on private property.

VI. Sequential Batch Reactor Design Standards

The proposed Ball Creek SBR WWTP will be designed and constructed in accordance to the following SBR Design Standards **(See Appendix 'G').** The design must be based on experience at other facilities and will meet the applicable requirements under Chapters 50, 70 and 90 of the 10 States Standards. Continuity and reliability of treatment equal to that of the continuous flow through modes of the activated sludge process will be provided. Supplemental treatment units may be required to meet applicable effluent limitations and reliability guidelines.

The aeration tank volumetric loading will not exceed 15 lb BOD5/d/1000 ft3. The reactor MLVSS and MLSS concentrations and aeration tank volumetric loading will be calculated at the low-water level. More than two tanks will be provided. The decantable volume and decanter capacity of the sequencing batch reactor system with the largest basin out of service will be sized to pass at least 75 percent of the design maximum day flow without changing cycle times. A decantable volume of at least 4 hours with the largest basin out of service based on 100 percent of the design maximum day flow is permissible. System reliability with any single aeration tank unit out of service and the instantaneous delivery of flow will be evaluated in the design of decanter weirs and approach velocities. The treated effluent from each reactor will be free of scum and have a suspended solids concentration no greater than 30 mg/L at any time. See Paragraphs 53.413 and 72.43 of the 10 States Standards. Scum removal will be provided. An adequate zone of separation between the sludge blanket and the decanter(s) shall be maintained throughout the decant phase. Decanters which draw the treated effluent from near the water surface throughout the decant phase are recommended. Solids management to accommodate basin dewatering will be considered.

The blowers will be provided in multiple units, so arranged and in such capacities as to meet the maximum air demand in the oxic portions of the fill/react and react phases of the cycle with the single largest unit out of service. Mechanical mixing independent of aeration will be provided for all systems where biological phosphorus removal or denitrification is required. The mixing equipment will be sized to thoroughly mix the entire basin from a settled condition within 5 minutes without aeration. The design effluent quality performance requirements for the plant will be sufficiently stringent to ensure acceptable effluent quality from any reactor. Flow paced composite sampling equipment and continuous turbidity metering for separately monitoring the effluent quality from each basin may be required by the regulatory agency. All 24-hour effluent quality composite samples for compliance reporting or monitoring plant operations will be flow-paced and include samples collected at the beginning and end of each decant phase. A programmable logic controller (PLC) will be provided. Multiple PLCs will be provided as necessary to assure rapid process recovery or minimize the deterioration of effluent quality from the failure of a single controller. An uninterruptible power supply with electrical surge protection will be provided for each PLC to retain program memory (i.e.,

process control program, last-known set points and measured process/equipment status, etc.) through a power loss. A hard-wired backup for manual override will be provided in addition to automatic process control. Both automatic and manual controls will allow independent operation of each tank. In addition, a fail-safe control will be provided which cannot be adjusted by the operator allowing at least 20 minutes of settling between the react and decant phases.

VII. Wastewater Treatment Facilities Design Standards

The proposed Ball Creek WWTP will be design and constructed in accordance with the following design standards as applicable for a Sequential Batch Reactor. The treatment plant structures, electrical, and mechanical equipment will be protected from physical damage by the one hundred (100) year flood. Treatment plants will remain fully operational and accessible during the twenty-five (25) year flood. This requirement applies to new construction and to existing facilities undergoing major modification. Flood plain regulations of state, province, and federal agencies will be considered.

The required degree of wastewater treatment will be based on the effluent requirements and water quality standards established by the responsible province, state agency and/or appropriate federal regulations including discharge permit requirements.

The plant design will provide the necessary flexibility to perform satisfactorily within the expected range of waste characteristics and volumes. Testing, including appropriately-composite samples, under various ranges of strength and flow rates (including diurnal variations) and waste temperatures over a sufficient length of time to demonstrate performance under climatic and other conditions which may be encountered in the area of the proposed installations.

Initial low flow conditions must be evaluated in the design to minimize operational problems with freezing, septicity, flow measurements and solids dropout. The design peak hourly flows must be considered in evaluating unit processes, pumping, piping, etc. The treatment plant design capacity will be as described in Chapter 10 of the 10 States Standards. The plant design flow selected will meet the appropriate effluent and water quality standards that are set forth in the discharge permit. The design of treatment units that are not subject to peak hourly flow requirements will be based on the design average flow. For plants subject to high wet weather flows or overflow detention pumpback flows, the design maximum day flows that the plant is to treat on a sustained basis will be specified. Facilities for the equalization of flows and organic shock load will be considered at all plants which are critically affected by surge loadings. The sizing of the flow equalization facilities will be based on data obtained herein and from Chapter 10 of the 10 States Standards. The shock effects of high concentrations and diurnal peaks for short periods of time on the treatment process, particularly for small treatment plants, will be considered.

All piping and channels will be designed to carry the maximum expected flows. The incoming sewer will be designed for unrestricted flow. Bottom corners of the channels must be filleted.

Conduits will be designed to avoid creation of pockets and corners where solids can accumulate. Suitable gates or valves will be placed in channels to seal off unused sections which might accumulate solids. The use of shear gates, stop plates or stop planks is permitted where they can be used in place of gate valves or sluice gates. Non-corrodible materials will be used for these control gates.

Component parts of the plant will be arranged for greatest operating and maintenance convenience, flexibility, economy, continuity of maximum effluent quality, and ease of installation of future units.

Flow division control facilities will be provided as necessary to insure organic and hydraulic loading control to plant process units and will be designed for easy operator access, change, observation, and maintenance. The use of head boxes equipped with adjustable sharp-crested weirs or similar devices is recommended. The use of valves for flow splitting is not recommended. Appropriate flow measurement facilities will be incorporated in the flow division control design.

Properly located and arranged bypass structures and piping will be provided so that each unit of the plant can be removed from service independently. The bypass design will facilitate plant operation during unit maintenance and emergency repair so as to minimize deterioration of effluent quality and insure rapid process recovery upon return to normal operational mode. Bypassing may be accomplished through the use of duplicate or multiple treatment units in any stage. Means such as drains or sumps will be provided to completely dewater each unit to an appropriate point in the process. Due consideration will be given to the possible need for hydrostatic pressure relief devices to prevent flotation of structures. Pipes subject to plugging will be provided with means for mechanical cleaning or flushing. Materials will be selected that are appropriate under conditions of exposure to hydrogen sulfide and other corrosive gases, greases, oils, and other constituents frequently present in wastewater. This is particularly important in the selection of metals and paints. Contact between dissimilar materials will be avoided or other provisions made to minimize galvanic action. The use of paints containing lead or mercury will be avoided. In order to facilitate identification of piping, particularly in the large plants, it is suggested that the different lines be color-coded. The following color scheme is recommended for purposes of standardization.

Raw sludge line - brown with black bands
Sludge recirculation suction line - brown with yellow bands
Sludge draw off line - brown with orange bands
Sludge recirculation discharge line - brown
Sludge gas line - orange (or red)
Natural gas line - orange (or red) with black bands

Non-potable water line - blue with black bands
Potable water line - blue
Chlorine line - yellow
Sulfur Dioxide - yellow with red bands
Sewage (wastewater) line - gray
Compressed air line - green
Water lines for heating digesters or buildings - blue with a 6-inch red band spaced 30 inches apart

A complete outfit of tools, accessories, and spare parts necessary for the plant operator's use will be provided. Readily accessible storage space and workbench facilities will be provided, and consideration will be given to provision of a garage for large equipment storage, maintenance, and repair. Effective site erosion control will be provided during construction. Upon completion of the plant, the ground will be graded and sodded or seeded. All-weather walkways will be provided for access to all units. Steep slopes will be avoided to prevent erosion. Surface water will not be permitted to drain into any unit. Particular care will be taken to protect trickling filter beds, sludge beds, and intermittent sand filters from stormwater runoff. Provision will be made for landscaping, particularly when a plant must be located near residential areas.

The outfall sewer will be so constructed and protected against the effects of floodwater, tide, ice, or other hazards as to reasonably insure its structural stability and freedom from stoppage. A manhole will be provided at the shore end of all gravity sewers extended into the receiving waters. Hazards to navigation will be considered in designing outfall sewers. All outfalls will be designed so that a sample of the effluent can be obtained at a point after the final treatment process and before discharge to or mixing with the receiving waters.

All plants will be provided with an alternate source of electric power or pumping capability to allow continuity of operation during power failures, except as noted below. Refer to paragraph 46.4 of the 10 States Standards for design details. Methods of providing alternate sources include the connection of at least two independent power sources such as substations, a power line from each substation is recommended, and will be required unless documentation is received and approved by the reviewing authority verifying that a duplicate line is not necessary, a portable or in-place internal combustion engine equipment which will generate electrical or mechanical energy, and c. Portable pumping equipment when only emergency pumping is required. Standby generating capacity normally is not required for aeration equipment used in the activated sludge process. In cases where a history of

long-term (4 hours or more) power outages have occurred, auxiliary power for minimum aeration of the activated sludge will be required. Full power generating capacity may be required by the reviewing authority for waste discharges to certain critical stream segments such as upstream of bathing beaches, public water supply intake or other similar situations. Continuous disinfection, where required, will be provided during all power outages. Continuous dechlorination is required for those systems that dechlorinate.

An adequate supply of potable water under pressure will be provided for use in the laboratory and for general cleanliness around the plant. No piping or other connections will exist in any part of the treatment plant which, under any conditions, might cause the contamination of a potable water supply. The chemical quality will be checked for suitability for its intended uses such as in heat exchangers, chlorinators, etc. Potable water from a municipal or separate supply may be used directly at points above grade for the following hot and cold supplies:

a. Lavatory;
b. Water closet;
c. Laboratory sink (with vacuum breaker);
d. Shower;
e. Drinking fountain;
f. Eye wash fountain; and
g. Safety shower.

Hot water for any of the above units will not be taken directly from a boiler used for supplying hot water to a sludge heat exchanger or digester heating unit. Where a potable water supply is to be used for any purpose in a plant other than those listed in paragraph 56.22 of the 10 States Standards, a break tank, pressure pump, and pressure tank will be provided. Water will be discharged to the tank through an air gap at least 6 inches above the maximum flood line or the spill line of the tank, whichever is higher. A sign will be permanently posted at every hose bib, faucet, hydrant, or sill cock located on the water system beyond the break tank to indicate that the water is not safe for drinking. Where it is not possible to provide potable water from a public water supply, a separate well may be provided. Location and construction of the well will comply with requirements of the governing state or province and local regulations. Where a separate non-potable water supply is to be provided, a break tank will not be necessary, but all system outlets will be posted with a permanent sign indicating the water is not safe for drinking. Toilet, shower, lavatory, and locker facilities will be provided in sufficient numbers and convenient locations to serve the expected plant personnel.

Floor surfaces will be sloped adequately to a point of drainage. Stairways will be installed in lieu of ladders for access to units requiring routine inspection and maintenance, such as digesters, trickling filters, aeration tanks, clarifiers, tertiary filters, etc. Spiral or winding stairs are permitted only for secondary access where dual means of egress are provided. Stairways will have slopes between 30 and 40 degrees from the horizontal to facilitate carrying samples, tools, etc. Each tread and riser will be of uniform dimension in each flight. Minimum tread run will not be less than 9 inches. The sum of the tread run and riser will not be less than 17 nor more than 18 inches. A flight of stairs will consist of not more than a 12-foot continuous rise without a platform.

Flow measurement facilities will be provided to measure the following flows:

a. Plant influent or effluent flow;

b. Plant influent flow: If influent flow is significantly different from effluent flow, both will be measured. This would apply for installations such as lagoons, sequencing batch reactors, and plants with excess flow storage or flow equalization;

c. Excess flow treatment facility discharges;

d. Other flows required to be monitored under the provisions of the discharge permit; and

e. Other flows such as return activated sludge, waste activated sludge, recirculation, and recycle required for plant operational control.

Indicating, totalizing, and recording flow measurement devices will be provided for all mechanical plants. Flow measurement facilities for lagoon systems will not be less than elapsed time meters used in conjunction with pumping rate tests or will be calibrated weirs. All flow measurement equipment must be sized to function effectively over the full range of flows expected and will be protected against freezing. Flow measurement equipment including approach and discharge conduit configuration and critical control elevations will be designed to ensure that the required hydraulic conditions necessary for accurate measurement are provided. Conditions that must be avoided include turbulence, eddy currents, air entrainment, etc., that upset the normal hydraulic conditions that are necessary for accurate flow measurement. Effluent composite sampling equipment will be provided at all mechanical plants with a design average flow of 0.1 MGD or greater and at other facilities where necessary to meet discharge permit monitoring requirements. Composite sampling equipment will also be provided as needed for influent sampling and for monitoring plant operations. The influent sampling point will be located prior to any process return flows.

All treatment plants will include a laboratory for making the necessary analytical determinations and operating control tests, except for those plants utilizing only processes not

requiring laboratory testing for plant control and where satisfactory off-site laboratory provisions are made to meet the permit monitoring requirements. For plants where a fully equipped laboratory is not required, the requirements for utilities, fume hoods, etc., may be reduced. The laboratory will have sufficient size, bench space, equipment, and supplies to perform all self-monitoring analytical work required by discharge permits, and to perform the process control tests necessary for good management of each treatment process included in the design. The facilities and supplies necessary to perform analytical work to support industrial waste control programs will normally be included in the same laboratory. The laboratory arrangement will be sufficiently flexible to allow future expansions will more analytical work be needed. Laboratory instrumentation and size will reflect treatment plant size, staffing requirements, process complexity, and applicable certification requirements. Experience and training of plant operators will also be assessed in determining treatment plant laboratory needs.

VIII. Sanitary Sewer Design Standards

All sewer design and construction will be conducted in accordance to the rules and regulations set forth by the Kentucky Division of Water (DOW). The project will be designed by using the Recommended Standards for Wastewater Facilities (10 States Standards) and Water Resources and Environmental Engineering by Metcalf & Eddy as references.

DESIGN & CONSTRUCTION OF SEWERS

Most of the proposed sewers will be constructed of High-Density Polyethylene (HDPE) Force Main. The existing residents and customers will be served by residential grinder pump stations that force the flow periodically through the conduit. We may place a minimum amount of SDR 35 PVC Gravity Sewer in areas where practical.

Sewers will be sufficiently deep to receive wastewater from basements and to prevent freezing. Insulation will be provided for sewers that cannot be placed at a depth sufficient to prevent freezing. The buoyancy of sewers will be considered and flotation of the pipe will be prevented with appropriate construction where high groundwater conditions are anticipated. All sewers will be designed and constructed to give mean velocities, when flowing full, of not less than 2.0 feet per second (0.6 m/s), based on Manning's formula using an "n" value of 0.013. The pipe diameter and slope will be selected to obtain the greatest practical velocities to minimize the settling of deposits. Where velocities greater than 15 feet per second are attained, special provisions will be made to protect against displacement by erosion and impact.

Sewers will be constructed with uniform slope between manholes. Sewers on 20 percent slopes or greater will be anchored securely with concrete anchors. Sewers 24 inches or less will be constructed with straight alignment between manholes. Straight alignment will be checked by either using a laser beam or lamping. Curvilinear alignment of sewers larger than 24 inches will not be used. When a smaller sewer joins a large one, the invert of the larger sewer will be lowered sufficiently to maintain the same energy gradient. Sewer extensions will be designed for projected flows even when the diameter of the receiving sewer is less than the diameter of the proposed extension at a manhole constructed in accordance with Section 34 of the 10 States Standards with special consideration of an appropriate flow channel to minimize turbulence when there is a change in sewer size. All sewers will be designed to prevent damage from superimposed live, dead, and frost induced loads. Proper allowance for loads on the sewer will be made because of soil and potential groundwater conditions,

as well as the width and depth of trench. At all necessary instances, special bedding, haunching and initial backfill, concrete cradle, or other special construction will be used to withstand anticipated potential superimposed loading or loss of trench wall stability. Installation specifications will contain appropriate requirements based on the criteria, standards, and requirements established by industry in its technical publications. Requirements will be set forth in the specifications for the pipe and methods of bedding and backfilling thereof so as not to damage the pipe or its joints, impede cleaning operations and future tapping, nor create excessive side fill pressures and ovalation of the pipe, nor seriously impair flow capacity.

The width of the trench will be ample to allow the pipe to be laid and jointed properly and to allow the bedding and haunching to be placed and compacted to adequately support the pipe. The trench sides will be kept as nearly vertical as possible. When wider trenches are specified, appropriate bedding class and pipe strength will be used. In unsupported, unstable soil the size and stiffness of the pipe, stiffness of the embedment and insitu soil and depth of cover will be considered in determining the minimum trench width necessary to provide adequate support for the pipe. Ledge rock, boulders, and large stones will be removed to provide a minimum clearance of 4 inches below and on each side of all pipes. Bedding Classes A, B, C, or crushed stone as described in ASTM C 12 will be used and carefully compacted for all rigid pipes provided the proper strength pipe is used with the specified bedding to support the anticipated load, based on the type soil encountered and potential ground water conditions. Embedment materials for bedding, haunching and initial backfill, Classes I, II, or III, as described in ASTM D 2321, will be used and carefully compacted for all flexible pipe provided the proper strength pipe is used with the specified bedding to support the anticipated load, based on the type soil encountered and potential groundwater conditions. All water entering the excavations or other parts of the work will be removed until all the work has been completed. No sanitary sewer will be used for the disposal of trench water, unless specifically approved by the engineer, and then only if the trench water does not ultimately arrive at existing pumping or wastewater treatment facilities. Final backfill will be of a suitable material removed from excavation except where other material is specified. Debris, frozen material, large clods or stones, organic matter, or other unstable materials will not be used for final backfill within 2 feet of the top of the pipe. The final backfill will be placed in such a manner as not to disturb the alignment of the pipe.

Deflection tests will be performed on all flexible pipes. The test will be conducted after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system. No pipe will exceed a deflection of 5 percent. If deflection exceeds 5 percent, replacement or correction will be accomplished in accordance with requirements in the approved specifications. The rigid ball or mandrel used for the deflection test will have a diameter not less than 95 percent of the base inside

diameter or average inside diameter of the pipe depending on which is specified in the ASTM Specification, including the appendix, to which the pipe is manufactured. The test will be performed without mechanical pulling devices. The installation of joints and the materials used will be included in the specifications.

Sewer joints will be designed to minimize infiltration and to prevent the entrance of roots throughout the life of the system. Service connections to the sewer main will be water tight and not protrude into the sewer. If a saddle type connection is used, it will be a device designed to join with the types of pipe which are to be connected. All materials used to make service connections will be compatible with each other and with the pipe materials to be joined and will be corrosion proof. Leakage tests will be specified. This may include appropriate water or low pressure air testing. The testing methods selected will take into consideration the range in groundwater elevations during the test and anticipated during the design life of the sewer. The leakage exfiltration or infiltration will not exceed 200 gallons per inch of pipe diameter per mile per day for any section of the system. An exfiltration or infiltration test will be performed with a minimum positive head of 2 feet. The air test will, as a minimum, conform to the test procedure described in ASTM C-828 for clay pipe, ASTM C 924 for concrete pipe, ASTM F-1417 for plastic pipe, and for other materials test procedures approved by the regulatory agency.

Manholes will be installed at the end of each line, at all changes in grade, size, and/or alignment, at all intersections, and at distances not greater than 400 feet for sewers 15 inches or less, and 500 feet for sewers 18 inches to 30 inches. Greater spacing may be necessary in larger sewers. Cleanouts may be used only for special conditions and will not be substituted for manholes nor installed at the end of laterals greater than 150 feet in length. A drop pipe will be provided for a sewer entering a manhole at an elevation of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert will be filleted to prevent solids deposition. Drop manholes will be constructed with an outside drop connection. Inside drop connections will be secured to the interior wall of the manhole and provide access for cleaning. Due to the unequal earth pressures that would result from the backfilling operation in the vicinity of the manhole, the entire outside drop connection will be encased in concrete. The minimum diameter of the manholes will be 48 inches; larger diameters may be necessary for large diameter sewers. A minimum access diameter of 22 inches will be provided. The flow channel straight through a manhole will be made to conform as closely as possible in shape, and slope to that of the connecting sewers. The channel walls will be formed or shaped to the full height of the crown of the outlet sewer in such a manner to not obstruct maintenance, inspection or flow in the sewers. Manholes will be of the pre-cast concrete or poured-in-place concrete type. Manhole lift

holes and grade adjustment rings will be sealed with non-shrinking mortar or other material approved by the regulatory agency. Inlet and outlet pipes will be joined to the manhole with a gasketed flexible watertight connection or any watertight connection arrangement that allows differential settlement of the pipe and manhole wall to take place. Watertight manhole covers are to be used wherever the manhole tops may be flooded by street runoff or high water. Locked manhole covers may be desirable in isolated easement locations or where vandalism may be a problem. Where corrosive conditions due to septicity or other causes are anticipated, consideration will be given to providing corrosion protection on the interior of the manholes.

The top of all sewers entering or crossing streams will be at a sufficient depth below the natural bottom of the stream bed to protect the sewer line. In general, the following cover requirements will be met: One (1) foot of cover where the sewer is located in rock; Three (3) feet of cover in other material. In major streams, more than three (3) feet of cover may be required; In paved stream channels, the top of the sewer line will be placed below the bottom of the channel pavement. Less cover will be approved only if the proposed sewer crossing will not interfere with the future improvements to the stream channel. Reasons for requesting less cover will be provided in the project proposal. Sewers located along streams will be located outside of the stream bed and sufficiently removed there from to provide for future possible stream widening and to prevent pollution by siltation during construction. The sewer outfalls, headwalls, manholes, gate boxes, or other structures will be located so they do not interfere with the free discharge of flood flows of the stream. Sewers crossing streams will be designed to cross the stream as nearly perpendicular to the stream flow as possible and will be free from change in grade. Sewer systems will be designed to minimize the number of stream crossings. Sewers entering or crossing streams will be constructed of ductile iron pipe with mechanical joints; otherwise they will be constructed so they will remain watertight and free from changes in alignment or grade. Material used to backfill the trench will be stone, coarse aggregate, washed gravel, or other materials which will not readily erode, cause siltation, damage pipe during placement, or corrode the pipe. Construction methods that will minimize siltation and erosion will be employed. The design engineer will include in the project specifications the method(s) to be employed in the construction of sewers in or near streams. Such methods will provide adequate control of siltation and erosion by limiting unnecessary excavation, disturbing or uprooting trees and vegetation, dumping of soil or debris, or pumping silt-laden water into the stream. Specifications will require that cleanup, grading, seeding, and planting or restoration of all work areas will begin immediately. Exposed areas will not remain unprotected for more than seven days.

Support will be provided for all joints in pipes utilized for aerial crossings. The supports will be designed to prevent frost heave, overturning, and settlement. Precautions against freezing, such as

insulation and increased slope, will be provided. Expansion jointing will be provided between above ground and below ground sewers. Where buried sewers change to aerial sewers, special construction techniques will be used to minimize frost heaving. For aerial stream crossings, the impact of flood waters and debris will be considered. The bottom of the pipe will be placed no lower than the elevation of the 50 year flood. Ductile iron pipe with mechanical joints is recommended.

When wastewater sewers are proposed in the vicinity of any water supply facilities the Recommended Standards for Water Works will be used to confirm acceptable isolation distances in addition to the following requirements. There will be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe will pass through or come into contact with any part of a sewer manhole. While no general statement can be made to cover all conditions, it is generally recognized that sewers will meet the requirements of the appropriate reviewing agency with respect to minimum distances from public water supply wells or other water supply sources and structures. All existing waterworks units, such as basins, wells, or other treatment units, within 200 feet of the proposed sewer will be shown on the engineering plans. Soil conditions in the vicinity of the proposed sewer within 200 feet of waterworks units will be determined and shown on the engineering plans. Sewers will be laid at least 10 feet horizontally from any existing or proposed water main. The distance will be measured edge to edge. If it is impossible to obtain proper horizontal and vertical separation as described above, both the water main and sewer will be constructed of slip-on or mechanical joint pipe complying with public water supply design standards of the agency and be pressure tested to 150 psi to assure watertightness before backfilling. Sewers crossing water mains will be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This will be the case where the water main is either above or below the sewer. The crossing will be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support will be provided for the sewer to maintain line and grade. When it is impossible to obtain proper horizontal and vertical separation as stipulated above, one of the following methods may be used: 1) the sewer will be designed and constructed equal to water pipe, and will be pressure tested at 150 psi to assure watertightness prior to backfilling, 2) either the water main or the sewer line may be encased in a watertight carrier pipe which extends 10 feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe will be of materials approved by the regulatory agency for use in water main construction.

When designing force mains we will maintain a cleansing velocity of at least 2 feet per second. The minimum force main diameter for raw wastewater will not be less than 4 inches. An air relief valve

will be placed at high points in the force main to prevent air locking. Vacuum relief valves may be necessary to relieve negative pressures on force mains. The force main configuration and head conditions will be evaluated as to the need for and placement of vacuum relief valves. Force mains will enter the gravity sewer system at a point not more than 2 feet above the flow line of the receiving manhole. Pipe and joints will be equal to water main strength materials suitable for design conditions. The force main, reaction blocking, and station piping will be designed to withstand water hammer pressures and associated cyclic reversal of stresses that are expected with the cycling of wastewater lift stations. Surge protection chambers will be evaluated. Force main construction near streams or water works structures and at water main crossings will meet applicable provisions of Sections 36, 37, and 38 of the 10 States Standards. Friction losses through force mains will be based on the Hazen-Williams formula or other acceptable methods. When the Hazen-Williams formula is used, the value for "C" will be 100 for unlined iron or steel pipe for design. For other smooth pipe materials such as PVC, polyethylene, lined ductile iron, etc., a higher "C" value not to exceed 120 may be allowed for design. When initially installed, force mains will have a significantly higher "C" factor.

The effect of the higher "C" factor will be considered in calculating maximum power requirements and duty cycle time to prevent damage to the motor. Where force mains are constructed of material which might cause the force main to be confused with potable water mains, the force main will be appropriately identified. Leakage tests will be specified including testing methods and leakage limits.

IX. Wastewater Pumping Station Design Standards

All regional wastewater pumping stations will be designed and constructed in accordance to these design standards. This project will require the construction of a regional pumping station due to the mountainous terrain. The pumping station will be designed according to all DOW requirements. Wastewater pumping station structures and electrical and mechanical equipment will be protected from physical damage by the 100 year flood. Wastewater pumping stations will remain fully operational and accessible during the 25 year flood. The pumping station will be readily accessible by maintenance vehicles during all weather conditions. The facility will be located off the traffic way of streets and alleys. Security fencing and access hatches with locks will be provided. Where it is necessary to pump wastewater prior to grit removal, the design of the wet well and pump station piping will receive special consideration to avoid operational problems from the accumulation of grit. Adequate provision will be made to effectively protect maintenance personnel from hazards. Equipment for confined space entry in accordance with OSHA and regulatory agency requirements will be provided for all wastewater pumping stations.

Suitable and safe means of access for persons wearing self-contained breathing apparatus will be provided to dry wells, and to wet wells. Access to wet wells containing either bar screens or mechanical equipment requiring inspection or maintenance will conform to paragraph 61.13 of the 10 States Standards. For built-in-place pump stations, a stairway to the dry well will be provided with rest landings at vertical intervals not to exceed 12 feet. For factory-built pump stations over 15 feet deep, a rigidly fixed landing will be provided at vertical intervals not to exceed 10 feet. Where a landing is used, a suitable and rigidly fixed barrier will be provided to prevent an individual from falling past the intermediate landing to a lower level. A manlift or elevator may be used in lieu of landings in a factory-built station, provided emergency access is included in the design. Where high groundwater conditions are anticipated, buoyancy of the wastewater pumping station structures will be considered and, if necessary, adequate provisions will be made for protection. Materials will be selected that are appropriate under conditions of exposure to hydrogen sulfide and other corrosive gases, greases, oils, and other constituents frequently present in wastewater. This is particularly important in the selection of metals and paints. Contact between dissimilar metals will be avoided or other provisions made to minimize galvanic action. Multiple pumps will be provided. Where only two units are provided, they will be of the same size. Units will have capacity such that, with any unit out of service, the remaining units will have capacity to handle the design peak hourly flow. All pumps will be tested by the manufacturer. These tests will include a hydrostatic test and an operating test. Pumps handling combined wastewater will be preceded by readily accessible bar racks to protect the pumps from clogging or damage. Bar racks will have clear openings as provided in paragraph 61.121 of the 10 States Standards. Where a bar rack is provided, a mechanical hoist will also be provided. Where the

size of the installation warrants, mechanically cleaned and/or duplicate bar racks will be provided. Pumps handling separate sanitary wastewater from 30 inch, or larger diameter sewers will be protected by bar racks meeting the above requirements. Appropriate protection from clogging will also be considered for small pumping stations. Pumps handling raw wastewater will be capable of passing spheres of at least 3 inches in diameter. Pump suction and discharge openings will be at least 4 inches in diameter. The pump will be so placed that under normal operating conditions it will operate under a positive suction head. Electrical systems and components (e.g., motors, lights, cables, conduits, switch boxes, control circuits, etc.) in raw wastewater wet wells, or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors may be present, will comply with the National Electrical Code requirements for Class I Group D, Division 1 locations. In addition, equipment located in the wet well will be suitable for use under corrosive conditions. Each flexible cable will be provided with a watertight seal and separate strain relief. A fused disconnect switch located above ground will be provided for the main power feed for all pumping stations. When such equipment is exposed to weather, it will meet the requirements of weatherproof equipment NEMA 3R or 4. A 110 volt power receptacle to facilitate maintenance will be provided inside the control panel for lift stations that have control panels outdoors. Ground fault interruption protection will be provided for all outdoor outlets. Each pump will have an individual intake. Wet well and intake design will be such as to avoid turbulence near the intake and to prevent vortex formation. A sump pump equipped with dual check valves will be provided in the dry well to remove leakage or drainage with discharge above the maximum high water level of the wet well. Water ejectors connected to a potable water supply will not be approved. All floor and walkway surfaces will have an adequate slope to a point of drainage. Pump seal leakage will be piped or channeled directly to the sump. The sump pump will be sized to remove the maximum pump seal water discharge which would occur in the event of a pump seal failure. The pumps and controls of main pumping stations, and especially pumping stations operated as part of treatment facilities, will be selected to operate at varying delivery rates. Insofar as is practicable, such stations will be designed to deliver as uniform a flow as practicable in order to minimize hydraulic surges. The station design capacity will be based on peak hourly flow as determined in accordance with paragraph 11.24 of the 10 States Standards and will be adequate to maintain a minimum velocity of 2 feet per second in the force main. Control float tubes and bubbler lines will be so located as not to be unduly affected by turbulent flows entering the well or by the turbulent suction of the pumps. Provisions will be made to automatically alternate the pumps in use.

Suitable shutoff valves will be placed on the suction line of dry pit pumps. Suitable shutoff and check valves will be placed on the discharge line of each pump (except on screw pumps). The check valve will be located between the shutoff valve and the pump. Check valves will be suitable for the material being handled and will be placed on the horizontal portion of discharge piping except for ball checks, which may be placed in the vertical run. Valves will be capable of withstanding normal

pressure and water hammer. All shutoff and check valves will be operable from the floor level and accessible for maintenance. Outside levers are recommended on swing check valves. Where continuity of pumping station operation is critical, consideration will be given to dividing the wet well into two sections, properly interconnected, to facilitate repairs and cleaning. The design fill time and minimum pump cycle time will be considered in sizing the wet well. The effective volume of the wet well will be based on design average flow and a filling time not to exceed 30 minutes unless the facility is designed to provide flow equalization. The pump manufacturer's duty cycle recommendations will be utilized in selecting the minimum cycle time. When the anticipated initial flow tributary to the pumping station is less than the design average flow, provisions will be made so that the fill time indicated is not exceeded for initial flows. When the wet well is designed for flow equalization as part of a treatment plant, provisions will be made to prevent septicity. The wet well floor will have a minimum slope of 1 to 1 to the hopper bottom. The horizontal area of the hopper bottom will be no greater than necessary for proper installation and function of the inlet. Covered wet wells will have provisions for air displacement to the atmosphere, such as an inverted "j" tube or other means.

Adequate ventilation will be provided for all pump stations. Where the dry well is below the ground surface, mechanical ventilation is required. If screens or mechanical equipment requiring maintenance or inspection are located in the wet well, permanently installed ventilation is required. There will be no interconnection between the wet well and dry well ventilation systems. In dry wells over 15 feet deep, multiple inlets and outlets are desirable. Dampers will not be used on exhaust or fresh air ducts. Fine screens or other obstructions in air ducts will be avoided to prevent clogging. Switches for operation of ventilation equipment will be marked and located conveniently. All intermittently operated ventilation equipment will be interconnected with the respective pit lighting system. Consideration will be given also to automatic controls where intermittent operation is used. The manual lighting/ventilation switch will override the automatic controls. For a two speed ventilation system with automatic switch over where gas detection equipment is installed, consideration will be given to increasing the ventilation rate automatically in response to the detection of hazardous concentrations of gases or vapors. The fan wheel will be fabricated from non-sparking material. Automatic heating and dehumidification equipment will be provided in all dry wells. The electrical equipment and components will meet the requirements in paragraph 42.35 of the 10 States Standards. Wet well ventilation may be either continuous or intermittent. Ventilation, if continuous, will provide at least 12 complete air changes per hour; if intermittent, at least 30 complete air changes per hour. Air will be forced into the wet well by mechanical means rather than solely exhausted from the wet well. The air change requirements will be based on 100 percent fresh air. Portable ventilation equipment will be provided for use at submersible pump stations and wet wells with no permanently installed ventilation equipment. Dry well ventilation may be either continuous or intermittent.

Ventilation, if continuous, will provide at least 6 complete air changes per hour; if intermittent, at least 30 complete air changes per hour. A system of two speed ventilation with an initial ventilation rate of 30 changes per hour for 10 minutes and automatic switch over to 6 changes per hour may be used to conserve heat. The air change requirements will be based on 100 percent fresh air.

Suitable devices for measuring wastewater flow will be provided at all pumping stations. Indicating, totalizing, and recording flow measurement will be provided at pumping stations with a 1200 gpm (75 L/s) or greater design peak flow. Elapsed time meters used in conjunction with annual pumping rate tests may be acceptable for pump stations with a design peak hourly flow up to 1200 gpm (75 L/s) provided sufficient metering is configured to measure the duration of individual and simultaneous pump operation.

There will be no physical connection between any potable water supply and a wastewater pumping station which under any conditions might cause contamination of the potable water supply. If a potable water supply is brought to the station, it will comply with conditions stipulated under paragraph 56.23 of the 10 States Standards.

Suction-lift pumps will be of the self-priming or vacuum-priming type. Suction-lift pump stations using dynamic suction lifts exceeding the limits outlined in the following sections may be approved upon submission of factory certification of pump performance and detailed calculations indicating satisfactory performance under the proposed operating conditions. Such detailed calculations must include static suction-lift as measured from "lead pump off" elevation to center line of pump suction, friction, and other hydraulic losses of the suction piping, vapor pressure of the liquid, altitude correction, required net positive suction head, and a safety factor of at least 6 feet. Self-priming pumps will be capable of rapid priming and repriming at the "lead pump on" elevation. Such self-priming and repriming will be accomplished automatically under design operating conditions. Suction piping will not exceed the size of the pump suction and will not exceed 25 feet in total length. Priming lift at the "lead pump on" elevation will include a safety factor of at least 4 feet from the maximum allowable priming lift for the specific equipment at design operating conditions. The combined total of dynamic suction-lift at the "pump off" elevation and required net positive suction head at design operating conditions will not exceed 22 feet. Vacuum-priming pump stations will be equipped with dual vacuum pumps capable of automatically and completely removing air from the suction-lift pump. The vacuum pumps will be adequately protected from damage due to wastewater. The combined total of dynamic suction-lift at the "pump off" elevation and required net positive

suction head at design operating conditions will not exceed 22 feet (6.7 m).

Submersible pumps and motors will be designed specifically for raw wastewater use, including totally submerged operation during a portion of each pumping cycle and will meet the requirements of the National Electrical Code for such units. An effective method to detect shaft seal failure or potential seal failure will be provided. Submersible pumps will be readily removable and replaceable without dewatering the wet well or disconnecting any piping in the wet well. Electrical supply, control, and alarm circuits will be designed to provide strain relief and to allow disconnection from outside the wet well. Terminals and connectors will be protected from corrosion by location outside the wet well or through use of watertight seals. The motor control center will be located outside the wet well, be readily accessible, and be protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code, to prevent the atmosphere of the wet well from gaining access to the control center. The seal will be so located that the motor may be removed and electrically disconnected without disturbing the seal. When such equipment is exposed to weather, it will meet the requirements of weatherproof equipment NEMA 3R or 4. Pump motor power cords will be designed for flexibility and serviceability under conditions of extra hard usage and will meet the requirements of the National Electrical Code standards for flexible cords in wastewater pump stations. Ground fault interruption protection will be used to de-energize the circuit in the event of any failure in the electrical integrity of the cable. Power cord terminal fittings will be corrosion-resistant and constructed in a manner to prevent the entry of moisture into the cable, will be provided with strain relief appurtenances, and will be designed to facilitate field connecting. Valves required under paragraph 42.5 of the 10 State Standards will be located in a separate valve pit. Provisions will be made to remove or drain accumulated water from the valve pit. The valve pit may be dewatered to the wet well through a drain line with a gas and water tight valve. Check valves that are integral to the pump need not be located in a separate valve pit provided that the valve can be removed from the wet well in accordance with paragraph 44.2 of the 10 State Standards.

Alarm systems will be provided for pumping stations. The alarm will be activated in cases of power failure, sump pump failure, pump failure, unauthorized entry, or any cause of pump station malfunction. Pumping station alarms will be telemetered to a municipal facility that is manned 24 hours a day. If such a facility is not available and a 24-hour holding capacity is not provided, the alarm will be telemetered to city offices during normal working hours and to the home of the responsible person(s) in charge of the lift station during off-duty hours. Audio-visual alarm systems with a self-contained power supply may be acceptable in some cases in lieu of the telemetering system outlined above, depending upon location, station holding capacity and inspection frequency.

The objective of emergency operation is to prevent the discharge of raw or partially treated wastewater to any waters and to protect public health by preventing back-up of wastewater and subsequent discharge to basements, streets, and other public and private property. Emergency pumping capability is required unless on-system overflow prevention is provided by adequate storage capacity. Emergency pumping capability may be accomplished by connection of the station to at least two independent utility substations, or by provision of portable or in-place internal combustion engine equipment which will generate electrical or mechanical energy, or by the provision of portable pumping equipment. Such emergency standby systems will have sufficient capacity to start up and maintain the total rated running capacity of the station. Regardless of the type of emergency standby system provided, a riser from the force main with rapid connection capabilities and appropriate valving will be provided for all lift stations to hook up portable pumps. For use during possible periods of extensive power outages, mandatory power reductions, or uncontrollable emergency conditions, consideration will be given to providing a controlled, high-level wet well overflow to supplement alarm systems and emergency power generation in order to prevent backup of wastewater into basements, or other discharges which may cause severe adverse impacts on public interests, including public health and property damage. Where a high level overflow is utilized, consideration will also be given to the installation of storage/detention tanks, or basins, which will be made to drain to the station wet well. Where such overflows affect public water supplies or other critical water uses, the regulatory agency will be contacted for the necessary treatment or storage requirements.

The general requirements will apply to all internal combustion engines used to drive auxiliary pumps, service pumps through special drives, or electrical generating equipment. The engine must be protected from operating conditions that would result in damage to equipment. Unless continuous manual supervision is planned, protective equipment will be capable of shutting down the engine and activating an alarm on site and as provided in Section 45 of the 10 States Standards. Protective equipment will monitor for conditions of low oil pressure and overheating, except that oil pressure monitoring will not be required for engines with splash lubrication. The engine will have adequate rated power to start and continuously operate under all connected loads. Reliability and ease of starting, especially during cold weather conditions, will be considered in the selection of the type of fuel. Underground fuel storage and piping facilities will be constructed in accordance with applicable state, provincial, and federal regulations. The engine will be located above grade with adequate ventilation of fuel vapors and exhaust gases. All emergency equipment will be provided with instructions indicating the need for regular starting and running of such units at full loads. Emergency equipment will be protected from damage at the restoration of regular electrical power. Where permanently-installed or portable engine-driven pumps are used, Engine-driven pumps will meet the design pumping requirements unless storage capacity is available for flows in excess of pump capacity.

Pumps will be designed for anticipated operating conditions, including suction lift if applicable. The engine and pump will be equipped to provide automatic start-up and operation of pumping equipment unless manual start-up and operation is justified. Provisions will also be made for manual start-up. Where manual start-up and operation is justified, storage capacity and alarm system must meet the requirements of paragraph 46.423 of the 10 State Standards. Where part or all of the engine-driven pumping equipment is portable, sufficient storage capacity with alarm system will be provided to allow time for detection of pump station failure and transportation and hookup of the portable equipment. Generating unit size will be adequate to provide power for pump motor starting current and for lighting, ventilation, and other auxiliary equipment necessary for safety and proper operation of the lift station. The operation of only one pump during periods of auxiliary power supply must be justified. Such justification may be made on the basis of the design peak hourly flows relative to single-pump capacity, anticipated length of power outage, and storage capacity. Special sequencing controls will be provided to start pump motors unless the generating equipment has capacity to start all pumps simultaneously with auxiliary equipment operating. Provisions will be made for automatic and manual start-up and load transfer unless only manual start-up and operation is justified. The generator must be protected from operating conditions that would result in damage to equipment. Provisions will be considered to allow the engine to start and stabilize at operating speed before assuming the load. Where manual start-up and transfer is justified, storage capacity and alarm system must meet the requirements of paragraph 46.433 of the 10 States Standards. Where portable generating equipment or manual transfer is provided, sufficient storage capacity with alarm system will be provided to allow time for detection of pump station failure and transportation and connection of generating equipment. The use of special electrical connections and double throw switches are recommended for connecting portable generating equipment. Where independent substations are used for emergency power, each separate substation and its associated transmission lines will be capable of starting and operating the pump station at its rated capacity.

X. Structural Design Standards

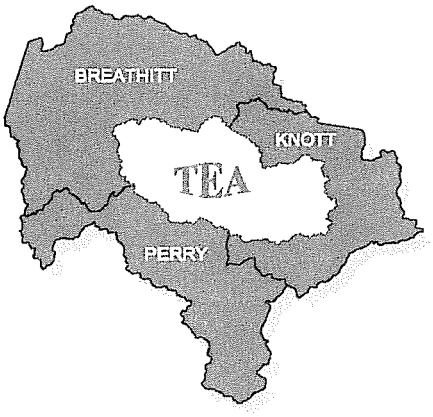
All structures will be designed in accordance to the latest edition of the Kentucky Building Code. More specifically, all concrete will be designed in accordance with ACI 318-99 and ACI 318R-99, Building Code Requirements for Structural Concrete and Commentary. All concrete for environmental structures will be designed in accordance with ACI 350-01 and ACI 350R-01, Code Requirements for Environmental Engineering Concrete Structures and Commentary. All steel will be designed in accordance with the latest edition of the Manual of Steel Construction, Allowable Stress Design.

All structures will be designed based on the "Strength Design" method as described in ACI 318-99 and ACI 350-01. Where appropriate, the following sanitary coefficients, S, will be used in accordance to ACI 350-01.

All concrete will attain a minimum compressive strength, f'c, in accordance with the durability requirements specified in ACI 318-99 and ACI 350-01. All concrete will be reinforced with Grade 60 reinforcement and shall be specified to meet the minimum shrinkage and temperature reinforcement requirement as specified in Table 7.12.2.1 of ACI 350-01. No concrete in an environmental application will have a reinforcement ratio of less than 0.003.

All foundations will be designed in accordance with the recommendations of the geotechnical engineer. All fill material will be compacted in accordance with the minimum recommendations as made by the geotechnical engineer.

Structures will be designed to resist flotation by a safety factor of not less than 1.25 based on the mass of the structure. The weight of the soil above the toe will be included in the mass. Friction between the structure and the backfill material will not be used to resist the uplift force. This analysis will be based on the 100 year flood elevation of the adjacent Balls Fork. Where practicable, ground water relief valves will be utilized to alleviate the potential for flotation. Also, where practicable, a properly designed foundation system will be used to reduce hydrostatic pressures.



TroublesomeCreek
ENVIRONMENTAL AUTHORITY

APPENDIX 'A'

The Ball Creek WWTP & Sewer Collection Project – Phase Map

N
W E
S
0' 3000' 6000'

PROPOSED
BALL CREEK
WWTP

CHESTNUT RIDGE DEVELOPMENT
& KNOTT COUNTY SPORTSPLEX

VEST QUAD | HANDSHOE QUAD
CARRIE QUAD | HINDMAN QUAD

LEGEND

PHASE I

PHASE II

DRAWN BY: JS
CHECKED BY: SRH

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

TROUBLESOMECREEK ENVIRONMENTAL AUTHORITY

BALL CREEK SANITARY SEWER PROJECT LOCATION MAP

SHEET: A
DATE: 02-27-2009

N
W
E
S
0'
3000'
6000'

PROPOSED
BALL CREEK
WWTP

CHESTNUT RIDGE DEVELOPMENT
& KNOTT COUNTY SPORTSPLEX

VEST QUAD
HANDSHOE QUAD
CARRIE QUAD
HINDMAN QUAD

LEGEND

PHASE I

PHASE II

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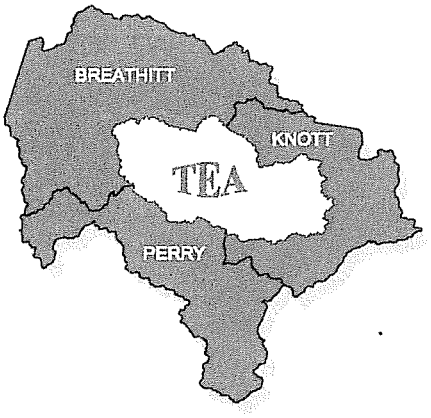
TROUBLESOMECREEK ENVIRONMENTAL AUTHORITY

BALL CREEK SANITARY SEWER PROJECT LOCATION MAP

SHEET: A
DATE: 02-27-2009



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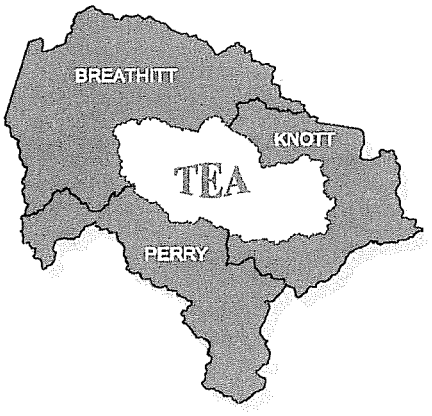
ENVIRONMENTAL AUTHORITY

APPENDIX 'B'

Ball Creek WWTP Site Location – Knob Bottom Map



TroublesomeCreek
ENVIRONMENTAL AUTHORITY

APPENDIX 'C'

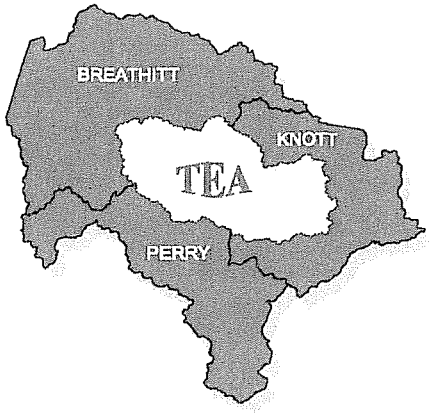
Project Cost Estimates

R.M. Johnson Engineering
P.O. Box 444
Hindman, Kentucky 41822

CONSTRUCTION COST ESTIMATE

Project : TFA - Ball Creek Sewer Project, Phase I
Date : 01/08/10 **Job No. :**
Est. By : SRH **Checked By :** RMJ
DRAWING NO. :

Ball Creek WWTP & Sewer Project 0.10 MGD WWTP with 6.0 miles of collection.	QUANTITY NO OF UNITS	QUANTITY UNIT MEAS.	COST PER UNIT		TOTAL COST
SEWER COLLECTION					
12" PVC Gravity Sewer Pipe, SDR 35	4,520	LF	$ 55.00		$ 248,600.00
6" PVC Gravity Sewer Pipe, SDR 35	350	LF	$ 20.00		$ 7,000.00
6" PVC Sewer Cleanouts	22	LF	$ 100.00		$ 2,200.00
12" X 6" Tees or Wyes	22	EA	$ 100.00		$ 2,200.00
Sanitary Sewer Manhole	25	EA	$ 3,000.00		$ 75,000.00
Rainguard	25	EA	$ 150.00		$ 3,750.00
2" HDPE Force Main, SDR 17	6,450	LF	$ 4.00		$ 25,800.00
6" HDPE Force Main, SDR 17	27,580	LF	$ 14.00		$ 386,120.00
200 GPM Lift Station/w Telemetry	1	EA	$ 115,000.00		$ 115,000.00
Repeater Telemetry Station	1	LS	$ 40,000.00		$ 40,000.00
8' Chain Link Security Fence	140	LF	$ 45.00		$ 6,300.00
8' Chain Link Security Gate	2	LS	$ 1,000.00		$ 2,000.00
40 GPM Sportsplex Lift Station	1	EA	$ 45,000.00		$ 45,000.00
Residential Grinder Pump Station (Complete)	40	EA	$ 3,500.00		$ 140,000.00
Air/Vacuum Relief Assembly	45	EA	$ 1,500.00		$ 67,500.00
Sanitary Sewer Creek Crossing	950	LF	$ 70.00		$ 66,500.00
Concrete Replacement	250	SY	$ 25.00		$ 6,250.00
Asphalt Pavement Replacement	250	SY	$ 25.00		$ 6,250.00
Gravel Replacement	500	SY	$ 15.00		$ 7,500.00
12" Bored Steel Encasement	910	LF	$ 125.00		$ 113,750.00
18" Bored Steel Encasement	330	LF	$ 175.00		$ 57,750.00
WWTP & SITE FACILITIES					
Erosion & Sediment Control	1	LS	$ 5,000.00		$ 5,000.00
3-Phase Power to Site	1	LS	$ 150,000.00		$ 150,000.00
WWTP Power Generator	1	EA	$ 70,000.00		$ 70,000.00
WWTP Site Preparation	1.5	AC	$ 25,000.00		$ 37,500.00
Influent Metering & Vault	1	LS	$ 30,000.00		$ 30,000.00
Aqua Aerobic SBR Equipment	1	EA	$ 355,000.00		$ 355,000.00
Onsite Plant Piping Installation	1	LS	$ 30,000.00		$ 30,000.00
Sanitary Sewer Manhole	1	EA	$ 3,000.00		$ 3,000.00
8" PVC SDR 35 Sewer	155	LS	$ 45.00		$ 6,975.00
Fiberglass Walkway Grating	500	SF	$ 27.50		$ 13,750.00
4 - 20' X 20' X 20' CIP Concrete SBR Basins	450	CY	$ 600.00		$ 270,000.00
Composite Sampler	2	EA	$ 7,500.00		$ 15,000.00
Influent Screening	1	EA	$ 75,000.00		$ 75,000.00
Ultraviolet Disinfection	1	LS	$ 145,000.00		$ 145,000.00
Post Aeration	1	LS	$ 40,000.00		$ 40,000.00
Effluent Metering & Vault	1	LS	$ 30,000.00		$ 30,000.00
Outlet Headwall Structure	1	EA	$ 5,000.00		$ 5,000.00
Sludge Handling	1	LS	$ 60,000.00		$ 60,000.00
Telemetry	1	LS	$ 35,000.00		$ 35,000.00
8' Chain Link Security Fencing	725	LF	$ 45.00		$ 32,625.00
8' Chain Link Security Gate	1	EA	$ 1,000.00		$ 1,000.00
CL 1 Asphalt Base 0.75D PG64-22	370	TON	$ 70.00		$ 25,900.00
DGA Base	875	TON	$ 25.00		$ 21,875.00
Access Road Gravel	35	TON	$ 20.00		$ 700.00
Onsite WWTP Lift Station	1	LS	$ 65,000.00		$ 65,000.00
Site Lighting	1	LS	$ 15,000.00		$ 15,000.00
Security System (CCTV Cameras, etc.)	1	LS	$ 15,000.00		$ 15,000.00
Water Meter Installation (Basin, Meter, Setter, PRV)	1	EA	$ 1,500.00		$ 1,500.00
Potable Water Plumbing	1	LS	$ 5,000.00		$ 5,000.00
Non-Potable Water Supply Pump	1	LS	$ 6,000.00		$ 6,000.00
Non-Potable Water Plumbing	1	LS	$ 10,000.00		$ 10,000.00
Non-Potable Water Yard Hydrants	8	EA	$ 1,250.00		$ 10,000.00
Seeding & Cleanup	1.5	AC	$ 5,000.00		$ 7,500.00
Office Trailor & Laboratory Equipment	1	LS	$ 75,000.00		$ 75,000.00
SUBTOTAL AMOUNT					**$ 3,092,795.00**
5% CONST. CONTINGENCY					**$ 154,500.00**
PRELIMINARY ENGINEERING					**$ 25,000.00**
ENGINEERING DESIGN		7.19%			**$ 222,380.00**
RESIDENT INSPECTION		4.97%			**$ 153,800.00**
ADDITIONAL ENGINEERING					**$ 105,000.00**
ADMINISTRATION					**$ 40,000.00**
LEGAL and LAND					**$ 80,000.00**
TOTAL ESTIMATED CONSTRUCTION COST					**$ 3,873,475.00**



TroublesomeCreek
ENVIRONMENTAL AUTHORITY

APPENDIX 'D'

DOW Wasteload Allocation – Effluent Limits

STEVEN L. BESHEAR
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

LEONARD K. PETERS
SECRETARY

February 20, 2009

Stephen R. Harris, EIT, LSIT
Civil/Project Engineer
R.M. Johnson Engineering, Incorporated
3376 Highway 550 East
P.O. Box 444
Hindman, Kentucky 41822

Re: High Quality Water Alternative Analysis
TroublesomeCreek Environmental Authority
Balls Fork WWTP
Knott County, Kentucky

Dear Mr. Harris:

The Division of Water has reviewed your February 16, 2009 High Quality Water Alternative Analysis (HQAA) submittal for the subject facility. Based on examination of the information provided, the Division has determined that adequate justification is provided to apply water quality-based limitations to the proposed discharge. The proposed wastewater treatment plant (WWTP) will have a design capacity of 50,000 GPD. Discharge will be to mile point (mp) 0.1 of Knob Bottom Branch to mp 15.0 of Balls Fork, segment number 04050.

Considering the abovementioned information, the wastewater treatment facilities must be designed to produce the following effluent concentrations.

	May 1 - October 31	November 1 - April 30
$CBOD_5$	10 mg/l	10 mg/l
Total Suspended Solids	30 mg/l	30 mg/l
Ammonia Nitrogen	4 mg/l	10 mg/l
Dissolved Oxygen	7 mg/l	7 mg/l
Total Residual Chlorine	0.011 mg/l	0.011 mg/l
Total Phosphorus	Monitor, mg/l	Monitor, mg/l
Total Nitrogen	Monitor, mg/l	Monitor, mg/l

Reliability Classification = Grade 3

In addition to the above, the monthly average and weekly maximum values of E. coli shall be at or below 130 colonies per 100 milliliters or 240 colonies per 100 milliliters, respectively, the year around. If a form of chlorine is proposed to disinfect the wastewater, then dechlorination will be required by your Kentucky Pollutant Discharge Elimination System (KPDES) permit. Some suitable form of effluent post aeration may also be necessary in order to produce the required dissolved oxygen concentration. Additional effluent limitations and water quality standards are contained in the Division of Water Regulations.

These preliminary design effluent limitations are valid for one (1) year from the date of this letter, and are subject to change as a result of additional information which may be presented during the public notice phase of the KPDES permitting process. Please note that this letter does not convey authorization or approval to proceed with the construction or operation of the proposed wastewater

treatment facilities. Construction and KPDES permit applications must be submitted to request such authorization. Nor does this letter ensure the issuance of either permit. During the review processes of these permits the Division of Water will further evaluate the viability of the project.

Should you have any questions regarding this correspondence, please contact me at (502) 564-8158, extension 4914 or E-mail at Courtney.Seitz@ky.gov.

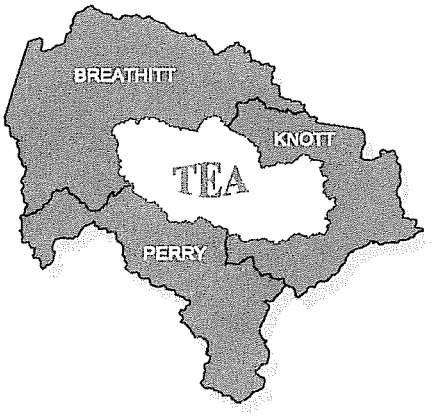
Sincerely,

Courtney Seitz

Courtney Seitz, WLA Coordinator
Surface Water Permits Branch
Division of Water

CS

c: TroublesomeCreek Environmental Authority
Compliance and Technical Assistance
Branch, Hazard Section
Division of Water Files



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ENVIRONMENTAL AUTHORITY

APPENDIX 'E'

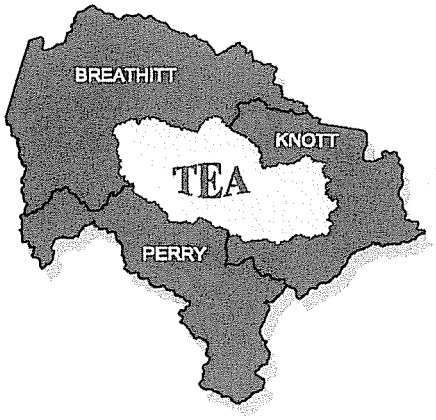
Environmental Director Letter of Support

Steve Harris

From: Cornett, Jeffrey D (LHD-Kentucky River Dist) [JeffreyD.Cornett@ky.gov]
Sent: Friday, December 19, 2008 12:04 PM
To: Steve Harris
Subject: Ball Creek Sewer Project

Mr. Harris, Having reviewed the proposed treatment plant for the Ball Creek area of Knott County, I feel that this would greatly benefit the environment of the area. This project would provide a means of wastewater disposal for a number of households and businesses that are currently using ageing septic systems and a number that are using unapproved septic systems or no septic system at all. The removal of this waste load from the creeks and streams would be a great benefit not only to this area but those downstream. Health departments are encountering increasing difficulties in designing septic systems, both residential and commercial, due to expanding populations and decreasing available land for these applications. Please keep me advised of the status of this project. If I can assist you in any way please contact me.

Jeff Cornett, Environmental Director
Kentucky River District Health Department
441 Gorman Hollow Road
Hazard, KY 41701
phone: 606-439-2361
fax: 606-439-0870



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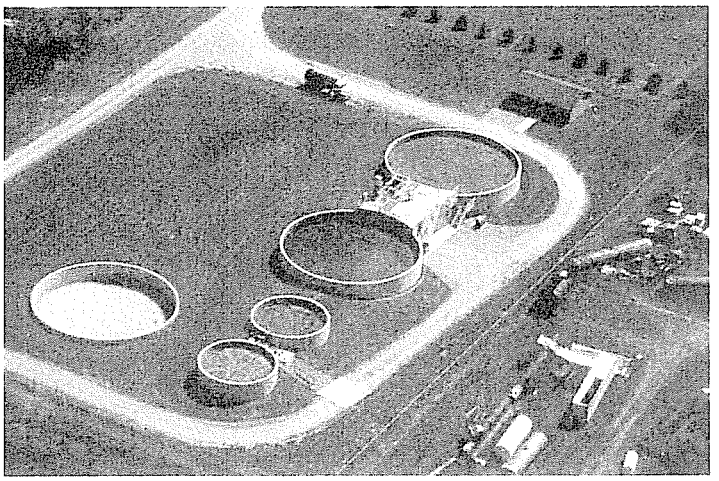
ENVIRONMENTAL AUTHORITY

APPENDIX 'F'

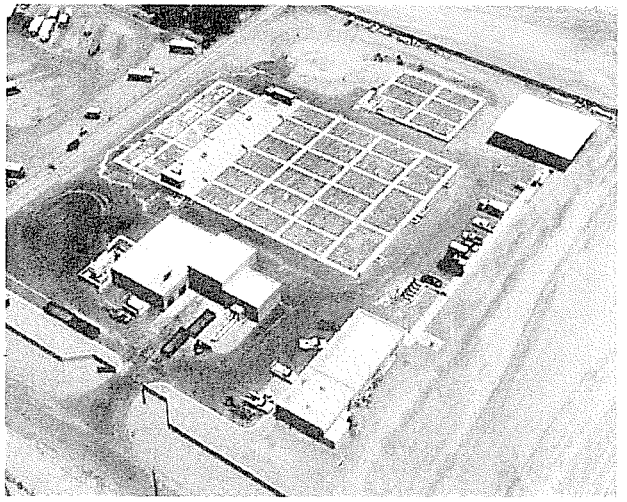
Examples of Existing SBRs in U.S.

PARK CITY WWTP
PARK CITY, KANSAS
SBR PERFORMANCE AND PROCESS RESULTS



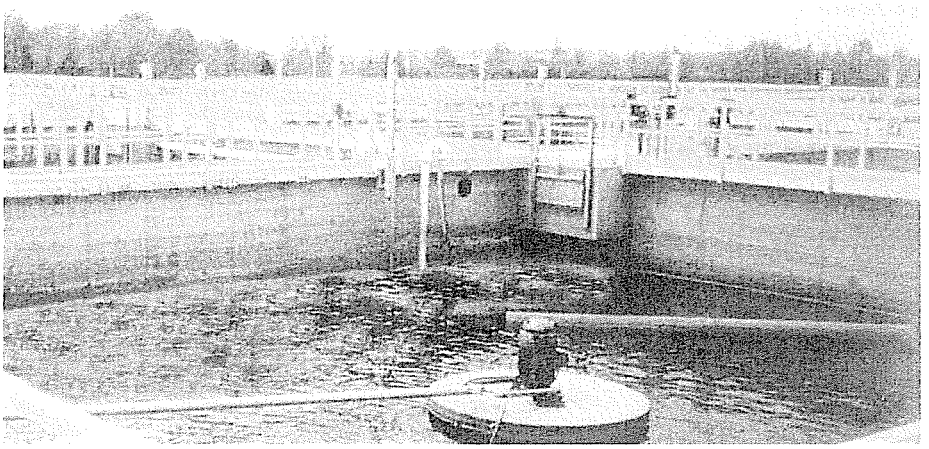
MONTH	YEAR	FLOW	BOD	BOD	TSS	TSS	NH3-N
			Inf.	Eff.	Inf.	Eff.	Eff.
		MGD	mg/l	mg/l	mg/l	mg/l	mg/l
JAN	2002	0.504	257	2.9	350	5	0.05
FEB	2002	0.515	207	3.5	250	6.2	0.08
MAR	2002	0.496	209	3.3	271	10.5	0.09
APR	2002	0.518	257	2.3	347	7.8	0.10
MAY	2002	0.573	195	0.5	261	3	0.17
JUNE	2002	0.598	179	1.9	152	5.8	0.10
JULY	2002	0.547	219	2.1	183	2.4	0.02
AUG	2002	0.538	217	0.8	267	5.1	0.10
SEPT	2002	0.440	217	1.2	193	6.4	0.00
OCT	2002	0.865	240	1.1	262	7.3	0.10
NOV	2002	1.100	218	3.0	224	9.6	0.91
DEC	2002	1.065	271	2.7	269	6.5	0.28
AVERAGES		**0.647**	**224**	**2.1**	**252**	**6.3**	**0.2**
DESIGN		**2.16**	**239**	**20**	**239**	**20**	**2.0**

PIMA UTILITIES WWTP
SUN LAKES, ARIZONA
SBR PERFORMANCE AND PROCESS RESULTS



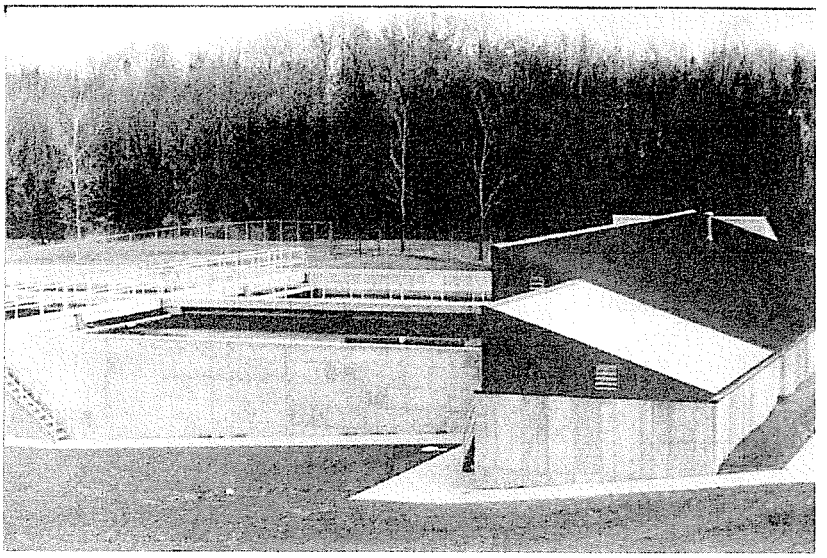
MONTH	YEAR	FLOW	BOD	BOD	TSS	TSS	TKN	NO2/NO3
			Inf.	Eff.	Inf.	Eff.	Eff.	Eff.
		MGD	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
JAN	2001	0.10	167	< 3	172	1.6	0.78	1.25
FEB	2001	1.09	220	< 2	160	< 10	2.2	0.59
MARCH	2001	1.10	210	2.20	180	< 10	0.84	0.74
APRIL	2001	1.02	300	< 2	190	< 10	0.84	0.69
MAY	2001	0.86	220	< 2	180	< 10	1.4	0.76
JUNE	2001	0.79	170	< 2	180	< 10		0.71
JULY	2001	0.74	160	< 2	40	< 10	0.84	0.2
AUG	2001	0.74	140	< 2	80	< 10	2.4	1.1
SEPT	2001	0.75	91	< 3	199	< .6	1.2	0.19
OCT	2001	0.87	140	< 3	224	< .6	0.93	0.34
NOV	2001	0.99	191	< 3	334	< .6	0.98	0.72
DEC	2001	0.98	205	8.00	167	< .6	1.7	1.29
AVERAGES		**0.837**	**184.50**	**5.10**	**175.50**	**1.60**	**1.28**	**0.72**
DESIGN		**2.4**	**280**	**10**	**340**	**10**	**8.0 TN**	**8.0 TN**

MARISSA WWTP
MARISSA, ILLINOIS
SBR PERFORMANCE AND PROCESS RESULTS



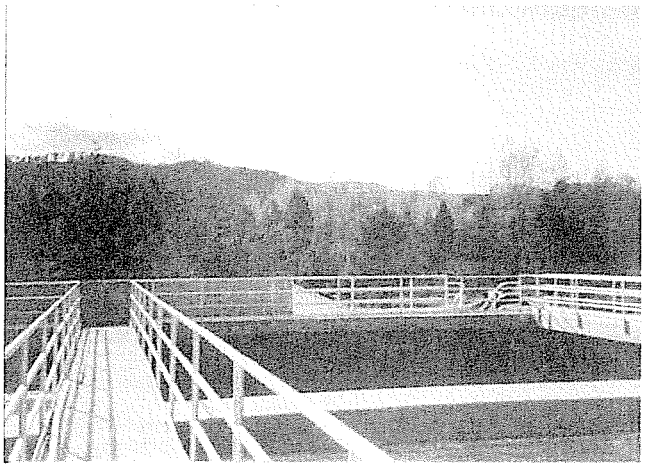
MONTH	YEAR	FLOW	BOD	BOD	TSS	TSS	NH4-N
			Inf.	Eff.	Inf.	Eff.	Eff.
		MGD	mg/l	mg/l	mg/l	mg/l	mg/l
JAN	2003	0.318	121	2.00	135	0.90	0.30
FEB	2003	0.559	95	2.00	139	1.00	0.12
MAR	2003	0.704	108	2.00	116	1.00	0.07
APR	2003	0.478	106	1.60	145	1.40	0.16
MAY	2003	0.761	97	1.60	108	1.40	0.08
JUNE	2003	0.669	95	2.10	124	1.00	0.07
JULY	2003	0.297	100	1.10	137	0.77	0.16
AUG	2003	0.208	118	0.20	206	3.10	0.14
SEPT	2003	0.227	135	2.14	161	3.00	0.10
OCT	2003	0.203	116	1.75	180	3.90	0.18
NOV	2003	0.410	126	1.90	177	2.25	0.14
DEC	2003	0.398	124	1.50	139	1.90	0.10
AVERAGES		**0.436**	**112**	**1.7**	**147**	**1.8**	**0.1**
DESIGN		**0.585**	**310**	**10**	**312**	**12**	**1.5**

CITY OF FLUSHING WWTP
FLUSHING, MICHIGAN
SBR PERFORMANCE AND PROCESS RESULTS



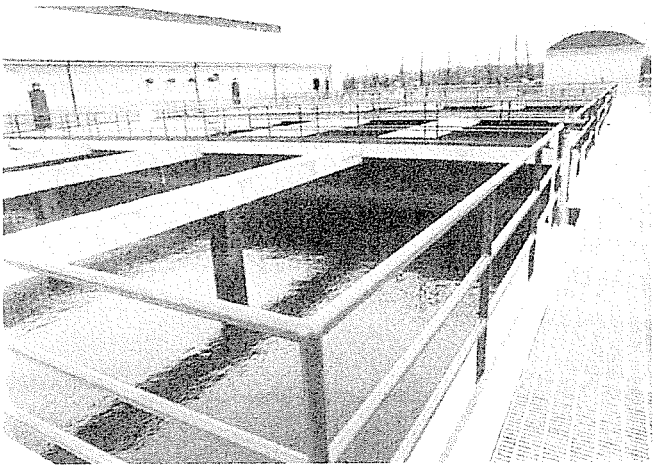
MONTH	YEAR	FLOW	BOD	BOD	TSS	TSS	NH3-N	NH3-N	P	P
			Inf.	Eff.	Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
		MGD	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
DEC	2000	1.24	128	3.00	127	8.4	14.3	0.25	1.75	0.564
JAN	2001	1.43	123	3.20	121	7.3	14.1	2.25	3.39	0.773
FEB	2001	2.17	74	3.40	80	8.8	8.6	0.69	2.11	0.437
MARCH	2001	1.73	43	4.90	89	12.0	10	1.49	2.43	0.660
APRIL	2001	1.76	48	4.40	102	10.0	9.9	2.27	2.76	0.755
MAY	2001	1.66	96	3.90	102	10.7	9.5	2.31	2.55	0.697
JUNE	2001	1.63	92	2.90	97	6.8	9.6	1.34	2.59	0.575
JULY	2001	1.11	129	2.00	128	4.0	17.2	1.41	3.84	0.606
AUG	2001	1.00	148	2.10	155	4.1	25.7	0.91	4.94	0.854
SEPT	2001	1.05	129	2.65	135	7.0	14.7	0.28	3.76	0.652
OCT	2001	1.50	105	2.20	109	3.8	16.1	1.06	3.58	0.723
NOV	2001	1.37	132	3.00	118	4.0	11.8	0.14	2.58	0.526
AVERAGES		**1.468**	**104**	**3.1**	**114**	**7.2**	**13.5**	**1.2**	**3.0**	**0.7**
DESIGN		**2.0**	**70**	**10**	**68**	**20**	**12**	**4.4**	**2.0**	**1.0**

OAKRIDGE WWTP
OAKRIDGE, OREGON
SBR PERFORMANCE AND PROCESS RESULTS



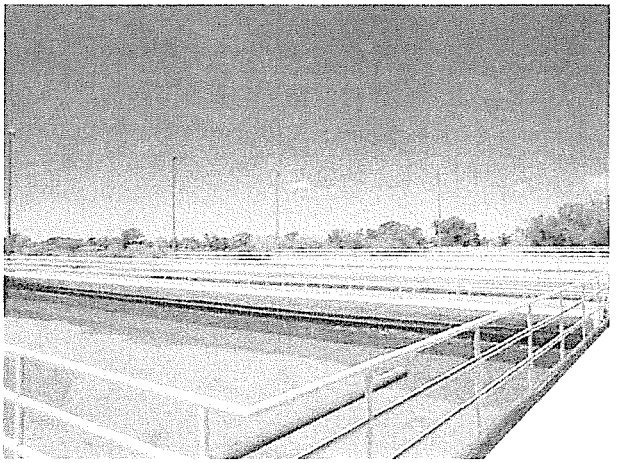
MONTH	YEAR	FLOW	BOD	BOD	TSS	TSS	NH3-N	NH3-N
			Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
		MGD	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
JAN	2001	0.370	137.0	4.00	216.0	7.00	20.86	0.35
FEB	2001	0.441	90.0	2.20	187.0	4.00	18.14	0.32
MAR	2001	0.489	87.0	4.80	193.0	12.00	17.08	0.67
APR	2001	0.598	68.0	3.20	152.0	7.00	11.19	0.36
AY	2001	0.405	100.0	5.80	177.0	7.00	19.69	0.52
JUNE	2001	0.269	138.0	4.50	258.0	6.00	29.43	0.42
JULY	2001	0.243	148.0	2.80	287.0	3.40	32.45	0.29
AUG	2001	0.238	140.0	3.60	243.0	4.80	32.94	0.27
SEPT	2001	0.238	158.0	3.60	325.0	4.00	24.40	0.24
OCT	2001	0.255	123.0	2.30	256.0	4.20	30.94	0.16
NOV	2001	0.558	113.0	2.60	191.0	5.60	26.99	0.27
DEC	2001	1.448	47.0	2.20	91.0	6.00	6.00	0.61
AVERAGES		**0.463**	**112.4**	**3.5**	**214.7**	**5.9**	**22.5**	**0.4**
DESIGN		**1.17**	**155**	**10**	**155**	**10**		**1.0**

SAGINAW CHIPPEWA WWTP
"SOARING EAGLE CASINO"
MOUNT PLEASANT, MICHIGAN
SBR PERFORMANCE AND PROCESS RESULTS



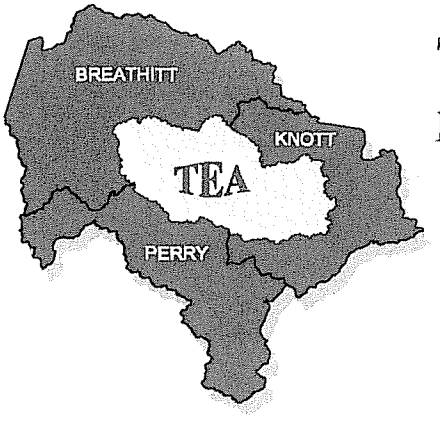
MONTH	YEAR	FLOW	BOD	BOD	TSS	TSS	P
			Inf.	Eff.	Inf.	Eff.	Eff.
		MGD	mg/l	mg/l	mg/l	mg/l	mg/l
JAN	1998	0.213	405	5.9	281	4.3	0.6
FEB	1998	0.222	270	4.3	240	3.7	0.4
MAR	1998	0.248	300	5.9	206	5.36	0.3
APR	1998	0.230	225	8.7	279	6.22	0.2
MAY	1998	0.237	263	3.3	212	3.81	0.5
JUNE	1998	0.256	180	4.9	218	4.06	0.4
JULY	1998	0.291	165	10.1	224	6.5	0.7
AUG	1998	0.337	180	12.1	184	6.93	0.9
SEPT	1998	0.349	187	8.0	174	7.13	0.4
OCT	1998	0.333	233	10.3	194	8.37	0.5
NOV	1998	0.338	255	6.4	249	5	0.4
DEC	1998	0.337	90	5.2	197	4.87	0.2
AVERAGES		**0.283**	**229**	**7.1**	**222**	**5.5**	**0.5**
DESIGN		**0.58**	**500**	**10**	**500**	**10**	**2.0**

SOUTH HAVEN WATER WORKS
VALPARAISO, INDIANA
SBR PERFORMANCE AND PROCESS RESULTS



MONTH	YEAR	FLOW	BOD	BOD	TSS	TSS	NH3-N	NH3-N	P	P
			Inf.	Eff.	Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
		MGD	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
OCT	2001	1.49	179	1.10	149	1.7	21.43	0.36	4.65	0.03
NOV	2001	1.23	211	1.20	200	1.1	23.48	0.27	5.35	0.30
DEC	2001	1.15	184	1.13	153	0.9	22.36	0.23	4.59	0.15
JAN	2002	0.97	241	1.04	165	1.1	27.77	0.24	5.49	0.08
FEB	2002	1.51	191	1.83	125	1.7	18.23	0.16	4.03	0.10
MAR	2002	1.55	203	2.00	122	1.1	17.46	0.59	3.89	0.15
APRIL	2002	1.57	186	2.03	124	1.3	15.66	0.38	3.45	0.11
MAY	2002	1.57	192	1.32	154	1.9	19.25	< 0.10	3.87	0.20
JUNE	2002	0.86	270	1.34	243	1.6	32.79	< 0.10	6.08	0.23
JULY	2002	0.82	298	1.34	208	1.9	34.31	0.22	6.03	0.26
AUGUST	2002	0.77	303	1.47	202	2.5	33.35	0.59	6.2	0.49
SEPT.	2002	0.80	273	1.07	204	1.6	31.42	0.18	6.15	0.49
AVERAGES		**1.191**	**228**	**1.4**	**171**	**1.5**	**24.8**	**0.3**	**5.0**	**0.2**
DESIGN		**2.0**	**200**	**10**	**200**	**10**	**25**	**1.5**	**6.0**	**1.0**

PLANT OPERATION: This facility was started up in June of 1995.



TroublesomeCreek
ENVIRONMENTAL AUTHORITY

APPENDIX 'G'

Preliminary Technical Specifications

SIEMENS

RECOMMENDED SPECIFICATION

OMNIFLO® SEQUENCING BATCH REACTOR
USING FINE BUBBLE AERATION

SIEMENS JTP #

SCOPE: The equipment furnished under this section shall be a complete Sequencing Batch Reactor (SBR) treatment system. The system shall be a ___ ( ) basin fill and draw activated sludge process. Each of the basins shall, in turn, within a discrete time period, be filled with screened and degritted raw wastewater and aerated in a batch mode. After aeration, the mixed liquor shall be allowed to settle. The treated supernatant shall then be withdrawn from the basin utilizing a floating effluent decanter mechanism, and discharged. The system shall consist of aeration system, sludge wasting system, blowers, floating effluent decanters, automatic influent valves, automatic decant valves, automatic air control valves, Influent Distribution/Sludge Collection manifolds, preprogrammed process control panel, and in-basin liquid piping, air piping, and supports. The SBR system shall be an **OMNIFLO®** SBR system as manufactured by **Siemens Water Technologies, Edwardsville, KS location.**

PREQUALIFICATION: Equipment manufacturers, except those listed, that desire to supply equipment specified in this section must submit a qualification package for approval by the Engineer no later than three (3) weeks prior to the bid date. The Engineer will issue an addendum listing the acceptable suppliers prior to the bid date. Qualification packages received after the submittal deadline will not be considered. The qualification package must include as a minimum:

1. Design calculations and a complete description of the proposed operating strategy, including operating cycle descriptions for minimum, design, peak, and peak instantaneous flows.
2. Complete specifications describing the equipment proposed.
3. Drawings, diagrams, and catalog cuts, for all mechanical and electrical equipment which show all process, structural, or ancillary equipment modifications required to comply with the full intent of the job specifications.
4. A complete list of all exceptions to the specification, for both mechanical and process features.
5. Current SBR installation list, with names of contacts and phone numbers.
6. Certification of compliance with the materials of construction specified.
7. Listing of any additional utilities required other than those specified.
8. Maintenance schedule, method of maintenance performance, and life expectancy of all equipment when applied as intended in the specifications.
9. List of all recommended spare parts.

GENERAL: The SBR system shall be installed as shown on the plans. The SBR aeration system shall be designed to transfer _____ lbs. of standard oxygen per hour per basin. The operating strategy shall provide for the following discrete periods in each cycle for all flow rates:

1. **ANOXIC FILL**. At design flow, a minimum of 30% of the total Fill period for each reactor shall be anoxic. The aeration system is not operated as the reactor is charged with incoming wastewater.

2. **AERATED FILL**. The aeration system is operated during the latter stage of the fill cycle, allowing biodegradation to begin.

3. **REACT**. Influent flow is diverted to the next basin in sequence; the aeration system is operated to complete biodegradation. A minimum of 30% of the total aeration time in any cycle shall be React.

4. **QUIESCENT SETTLE**. Aeration is terminated, and the biomass is allowed to settle. The Settle period shall be a minimum of 45 minutes, and be accomplished under perfect quiescent conditions; no flow shall enter, or be withdrawn from, a reactor during the Settle period.

5. **DECANT**. Treated effluent is withdrawn from the upper portion of the reactor by a floating, solids excluding decanter.

To insure consistent microorganism selection, reactor basins shall be intermittently fed, and operate in a "complete mix" mode. Processes utilizing continuously fed, or "plug flow" reactors will not be acceptable. A preprogrammed process controller shall control the process and incorporate each of the above periods in each cycle, under all flow conditions. Strategies that eliminate Anoxic Fill and/or React at peak flow rates will not be acceptable. The operating strategy shall automatically increase the percentage of total aeration (Aerated Fill plus React) in each cycle, directly proportional to total batch size. Systems utilizing float control, or level set points to increase aeration in "steps" will not be acceptable. Minimum total aeration percentages shall be:

Minimum Flow	17.5% of each cycle
Average Flow	37.5% of each cycle
Peak Flow	50% of each cycle

The SBR system shall be furnished in accordance with the following specifications and as shown on the plans. The valves, equipment, materials of construction, and controls specified under this section supersede any other specifications located elsewhere in the contract documents.

a raised lip around the diffuser contact surface to insure a proper seal against the diffuser gasket.

The diffuser membrane shall be EPDM rubber, specially compounded for use in wastewater. The membrane shall be designed with an integral O-ring around the outer periphery for compression between the diffuser base and the retaining ring. The center portion of the membrane shall have increased thickness for reinforcement. The membrane shall be perforated by a multitude of miniscule "I" - shaped slits lying in concentric circles of varying diameters.

The membrane shall be 9" in diameter and have the following minimum characteristics:

Specific Gravity	1.15 ±2	
Ozone Resistance	Pass	ASTM D-1171
Durometer, Shore A	55 ± 3	ASTM D-2240
Tensile Strength	≥ 10 N/mm2	ASTM D-412
Elongation at Break	≥ 500%	ASTM D-412
Max. Compression Set,	≤ 15% @ (70 ± 1) °C, 24hrs	ASTM D-573

There shall be a molded PVC support plate inserted into the diffuser base for support of the membrane when the airflow is discontinued. The plate shall support the full area of the membrane, except for a central opening allowing the air to pressurize the membrane.

The retaining ring shall be molded of PVC and shall contain threads for attachment to the threads on the diffuser base. Upon tightening of the retaining ring, the membrane O-ring shall be compressed into the groove on the diffuser base to provide a positive seal. There shall be a minimum of 2 ½ threads engagement to ensure a complete seal with the diffuser holder.

The diffuser holder shall be attached to the pipe by means of a mechanical attachment (rivet). Each rivet will have a ¼" hole that will act as the balancing orifice with a minimum amount of headloss.

Air shall enter through a ¼" orifice in the diffuser holder. The chamber in the diffuser holder shall then fill with air until sufficient back pressure is reached to push air through the membrane media, thereby producing fine bubble aeration.

Manifold and drop pipe supports to be fabricated from 304 stainless steel. Each support shall have a support cradle with a minimum 2" wide bearing surface and shall be secured to the concrete bottom with two (2) 304 stainless steel threaded rods with a minimum diameter of ½". Each rod will be anchored to the concrete by a vinylester resin adhesive designed for long term wet base conditions. Maximum spacing between supports shall be 8'-0" center to center.

Distribution header supports **(flat bottom tank only)** are to be fabricated from 304 stainless steel. Each support shall have a support cradle with a minimum 2" wide bearing surface and shall be attached to one (1) 304 stainless steel threaded rod with a minimum diameter of 3/8". Rod will be attached to the concrete floor with one (1) vinylester adhesive anchor. Maximum

Each diffuser assembly shall be factory assembled and include two diffuser units with mounting saddle. The diffuser membrane shall be fully supported over the full length and circumference with a 3.5" PVC membrane support frame with internal end cap. Each diffuser membrane shall be held in place with two 304 stainless steel clamps.

Each diffuser unit shall be capable of operating under continuous or intermittent conditions and shall be designed with check valve capabilities to prevent entry of mixed liquor into the diffuser unit or air piping on air shutdown or interruption of air supply. Check valve shall consist of a non-perforated section that seals against the support frame air distribution orifices upon termination of air flow. Diffuser assemblies shall be completely factory assembled with diffuser units, membranes, and mounting saddle factory installed. Field solvent welding of diffusers is not acceptable.

Diffuser saddle mount shall be ABS construction and shall be capable of withstanding an external force of 4,800 inch pounds without structural failure of the air distribution pipe, diffuser unit connection, or mounting saddle. Saddle mount shall fully encompass the air distribution header and reinforce the pipe section at the diffuser assembly connection. An O-ring gasket shall be provided to ensure an air tight seal between the mounting saddle and air header.

The diffuser membrane shall be EPDM rubber, specially compounded for use in wastewater. The membrane shall have the following minimum characteristics:

Base Polymer	EPDM	
Ozone Resistance	Non-cracking	ASTM D-471-95
Tensile Strength	1,850 psi min	ASTM D-412-92
Tensile Strength, Die T, pli	65 min	ASTM D-624-91
UV Resistance	Carbon black	
Ultimate Elongation	650 min	ASTM D-412-92

Manifold and drop pipe supports to be fabricated from 304 stainless steel. Supports shall accommodate longitudinal movement in the piping components due to thermal expansion and contraction over a temperature range of 100° F. Supports shall restrain the axial and rotational movement of the pipe while providing for unrestrained longitudinal movement. Supports shall allow leveling of the air pipe within 2" vertical adjustment at each support. Each pipe support shall be connected to the floor by a minimum of two 304 stainless steel anchor bolts. The integrated pipe support assembly shall be designed to withstand the associated uplift force of the piping and diffuser assemblies with a minimum deign factor of ten.

Flanged joints shall Van Stone type with through bolts. The flanged joints shall transmit the longitudinal forces caused by expansion and contraction of the air distribution header. All flanged joints shall have 45 to 55 durometer, Shore A, neoprene gaskets.

Prior to connecting the diffuser to the headers, the Contractor shall carefully clean all piping, headers, and accessories through which air is delivered, so that all dust, dirt, oil, grease, or other foreign material will be effectively removed from contact with the air being blown through the diffusers.

Diffuser manifold weldment	304 stainless steel
Rigid air delivery column	304 stainless steel
Angle brackets	304 stainless steel
Roller frames	304 stainless steel
Anti-rotation plate	304 stainless steel
Axle	304 stainless steel
Retrieval beam assembly	Galvanized steel
Hoist	Galvanized steel
Rack rotation handle	Galvanized steel

Each assembly shall include a diffuser hoist assembly with (manual winch) (worm gear hand winch with power drive connection. A total of one (1) portable electric drill motor shall be included. The portable electric drill motor shall operate from a 115 volt, single phase, 60 hertz electric supply).

(OPTIONAL FLOATING MIXERS)

FLOATING MIXERS: A total of ___ ( ) floating mixers shall be furnished. Each mixer shall consist of a motor with a one-piece shaft, a direct driven constant speed impeller, an integral flotation unit, an impeller volute and discharge assembly. Each mixer shall have a pumping rate of _____ gpm, and shall have a mixing area of influence sufficient to suspend biological solids without the addition of air.

Each mixer shall be driven by a __ Hp, _____ RPM electric motor suitable for continuous operation with _____ volts, ___ phase, ___ cycle power. Motors shall be TEFC, rated for severe chemical duty, and shall have a 1.15 service factor. Motor windings shall be moisture resistant, non-hygroscopic with NEMA class F insulation. All motor frame parting surfaces shall be deep registered and Permatex sealed, and through bolts, nuts and screws shall be of type 18-8 stainless steel. Condensate drains shall be located at the lowest point in the lower end-bell housing and at the lowest point in the junction box. Motor bearings shall be rated for 100,000 hours life. Lower thrust bearings shall be double row, angular contact type. A labyrinth seal shall be provided below the bottom bearing to prevent moisture from penetrating around the motor shaft. Motor bearings shall be shielded on the bottom side only; no sealed bearings shall be used. A slinger that rotates with the motor shall be provided immediately below the lower motor bearing to protect the bearings from liquid. The opening in the motor housing where the winding leads extend to the motor junction box will be completely potted with epoxy filler to ensure that moisture does not enter the motor housing through the junction box. Neoprene gaskets or seals between the motor housing and junction box are not acceptable; however Neoprene gaskets will be used at the motor junction box cover.

The impeller shaft shall consist of 17-4 P.H. stainless steel in the 1150 H.T. condition. The motor shall have a one piece motor shaft which runs continuous from the top motor bearing, through the lower bearing and extending through the propeller. The end of the propeller shaft must be keyed and threaded for mating to the propeller. Shafts which are not both keyed and threaded will not be acceptable. The motor drive shaft shall be machined to a tolerance of

Engineer's standard pump specification may be inserted.

BLOWERS

Engineer's standard blower specification may be inserted. Type and air flow shall be as described in Jet Tech design calculations.

DECANTERS: There shall be a total of ___ ( ) floating, solids excluding decanters to extract final effluent from the reactor basins. Fixed decanters will not be acceptable. Each decanter shall consist of an effluent withdrawal manifold, having several solids excluding orifice assemblies, with a single foam filled float, and shall be capable of intermittent operation. The decanter assembly shall be constructed of machine filament wound, fiberglass reinforced thermosetting resin pipe fabricated in strict accordance with ASTM Specification D-2996-01. The decanter shall be designed to be capable of withdrawing the effluent at an average rate of _____ gallons per minute. Decanters must employ positive mechanical type seals for excluding solids from the draw tube. Decanters having an open conduit or any open areas exposed to the mixed liquor during react, or that require additional equipment or motors for pressurization, wear movement, or complete removal out of the liquid, are unacceptable.

The draw tube, containing the orifices for removal of effluent shall be integrally attached to the foam filled float such that the float remains level throughout the full range of operation, and to maintain submergence of the orifices of the main body. The main body will be connected to the effluent piping by means of a ___" flanged stub. The effluent pipe shall include a "knee" joint to allow vertical movement. The "knee" joint shall be wire reinforced rubber hose with a flange at each end, and include a support mechanism that allows vertical articulation, but precludes lateral or twisting movement. Hose shall be Type "E" suitable for abrasive materials, and shall be rated at 30 inches mercury vacuum and 15 PSI working pressure. The effluent pipe shall be provided with a flanged connection for mounting the decanter system to the installed pipe through the basin wall. Flange connection shall be in accordance with ANSI standard 150 pound bolt pattern. Hardware at this flanged connection interface shall be furnished by the contractor.

The solids excluding orifice assemblies shall be field replaceable, and attached to the effluent withdrawal manifold. The assembly shall consist of a 304 stainless steel orifice plate, 302 stainless steel constant compression spring, 304 stainless steel spring housing, a PVC drive rod, a hard rubber plug, and a 304 stainless steel support/alignment cage assembly. The solids excluding orifice assemblies shall be factor aligned and welded to form a complete assembly. The drive rod shall seat against the spring, in the spring housing, and be attached by a threaded rod to the sealing plug. The point of decanted effluent discharge downstream of the SBR shall be either constantly submerged, or designed with a water trap.

All necessary supports for the decanter mechanism shall be provided. The supports will be located on the basin floor, and will support the decanter mechanism when the basin is dewatered. The supports shall be fabricated of (Type 304 stainless steel) (commercial quality carbon steel, sandblasted to a near white finish, and finished with an Epoxy-Polyamide coat of

Quarter-Turn Actuators: The electric motor operator shall consist of motor, reduction gearing, position limit switches and torque limiting switches mounted in a NEMA IV housing. Actuators shall be rated for 50 PSI working pressure. Local open / close pushbutton stations are not required on the actuators. Open / close switches shall be provided for hand operation of valves at the SBR control panel.

The motor shall be of the high torque type, designed for continuous duty rating. Motors and wiring shall have Class "B" or better insulation. Overload protection shall be provided by auto-reset thermal trip circuit breakers embedded in the motor windings. All motor leads shall be terminated at an internal terminal strip. The motor will operate on an AC power supply of 120 volts, single phase, 60 cycle for butterfly valves 16" and smaller / plug valves 12" and smaller; and 460 volts, three phase, 60 cycle for butterfly valves 18" and larger / plug valves 14" and larger. Actuators shall be provided with integral motor starters (if required). Power for all automatic valves shall be the responsibility of the installing contractor. Valve power shall not be provided through the SBR control panel.

The integral self-locking power gearing shall be compound epicyclic or combined helical and worm gear type only. Motor breakers are unacceptable. Gearing shall be grease or oil lubricated with high speed parts running on anti-friction bearings. Motor shall operate from open to full close in 60 seconds. Disassembly of gears shall not be required to remove the motor.

The handwheel shall not rotate during electrical operation. When the unit is being operated manually, it shall automatically return to electric operation when the handwheel is released. The transfer from electrical operation to manual operation shall be accomplished by a declutching mechanism, which will disengage the motor mechanically. The unit shall be capable of being clutched or declutched while the motor is energized with no damage to the clutch or gear mechanism. Clockwise rotation of the handwheel shall close the valve. If the motor is energized during manual operation, the unit shall remain in manual mode without endangering personnel operating the unit.

Failure of the motor or motor gearing shall not hinder manual operation. Two sets of limit switches set at the open and close positions shall be provided and are to be geared directly to the valve to follow its position at all times, including during manual operation. Additional switches shall be provided, if required.

A double-acting torque limiting switch shall be provided, which is responsive to the mechanical torque developed by seating or an obstruction.

SUBMERSIBLE PRESSURE TRANSDUCERS. Submersible pressure transducers shall be specially designed for direct submergence in wastewater. Units shall be constructed of stainless steel.

CONTROL PANEL OPTION 2
(FLOAT AND TIMER STRATEGY)

Float and Timer Software: SBR operating strategy will be time-based with level indicator override. Software shall be configured for as many SBR tanks as will operate in sequence. Provisions for detection of pump, blower and valve failure shall be provided. Float switches, retrievable mounting mast, and mounting hardware for each tank shall be provided.

I/O Cards: Input and output cards shall have removable wiring terminal strips. All wiring to module will terminate on terminal strip. Individual lamps for each input or output shall be provided on each card. Analog input and output cards shall have a minimum resolution of 12 bits.

Operator Interface: All setpoints and progress monitoring shall be accessible with the standard panel mounted operator interface. Interface shall consist of a display and membrane keypad, and software for communications to the PLC hardware system. Display shall consist of a 20 character by 4 line vacuum fluorescent display. Memory programming shall be in a "menu" structure, allowing easy access to all points. Function keys shall be programmed for one key access to most commonly used data. Direct access to any setpoint shall be available. Individual data points as well as group data points shall be password protected as directed by the owner. All setpoints shall be described with text that explains specifically what the setpoint or monitoring point is. Operator interfaces that refer to PLC memory register locations are unacceptable. All numeric values shall be represented with floating point decimal in correct position, sign (for negative numbers), and annotated with units designation (i.e. feet, gpm, minutes). Setpoints shall be protected by low and high limits. All operator interface programming and configuration data shall be permanently stored in EPROM.

Control circuits shall allow for manual override of PLC system by selector switches on the panel front. Panel mounted indicator lamps for operation and failure of equipment shall be provided. Overload cutout and seal failure indication shall be provided for submersible pumps. Float switch detection of high level in each SBR shall override the transducer level signal to initiate an emergency decant. All failure lamps and alarm horn operations shall annunciate following I.S.A. sequence "A".

(PC BASED OPERATOR INTERFACE OPTION)

PC Based Operator Interface. A minimum ___ Mhz speed, Intel Pentium based computer with 64 megabytes of RAM memory shall be provided to run the operator interface software. A 17" SVGA monitor (1024 x 768 pixel resolution), modem, and communications card for connection to the PLC shall be provided with the computer. A keyboard, mouse, 3 ½" floppy drive, CDROM drive, desktop printer, operating system software and graphics software shall also be provided. The graphics software shall be configured to represent the various process equipment and control loops and allow access to the operator adjustable setpoints. Data collection and limited report generation shall be included. Software package to be In Touch as manufactured by Wonderware Software Development Corporation.

R. M. JOHNSON ENGINEERING
RMJ
P.O. Box 444
Hindman, Kentucky 41822
Tel (606) 785-5926
Fax (606) 785-0244
e-mail: info@rmje.net

RIGHT OF WAY EASEMENT

That in consideration of ONE DOLLAR ($1.00) and other good and valuable consideration paid to _____, et al, whose address is _____, referred to as "GRANTOR (S)", by Toublesome Creek Environmental Authority (TEA), c/o KRADD, 917 Perry Park Road, Hazard, Kentucky 41701, hereinafter referred to as "GRANTEE (S)", the receipt of which is hereby acknowledged, the GRANTOR (S) does hereby grant, bargain, sell, transfer and convey unto the GRANTEE (S) its successors and assigns, a perpetual easement with the right to erect, construct, install and lay, and thereafter use, operate, inspect, repair, maintain, replace and remove (wastewater transmission line(s) and appurtenant facilities), over across, and through the land of the GRANTOR(S) together with the right of ingress and egress to and over the easement area for the purposes of this easement.

The construction easement shall be 30 feet wide, 15 feet on either side of the centerline of the sewer line in width, for the purpose of installing a wastewater line. The permanent easement shall be 20 feet wide, 10 feet on either side of the centerline of the sewer line in width, for the purpose of maintaining a wastewater line.

The real property affected by the grant of this easement and right-of-way is located at _____, and is part of the same property conveyed to GRANTOR (S) by _____ on _____ day of _____, ____ 09, as recorded in Deed Book _____, Page _____ in the Knott County Clerk's Office.

The consideration herein above recited shall constitute payment in full for any damages to the land of the GRANTOR (S), his heirs, successors and assigns, by reason of the installation, operation and maintenance of the facilities, structures or improvements referred to herein. The GRANTEE (S) covenants to maintain the easement in good repair so that no unreasonable damage will result from its use to the adjacent land of the GRANTOR (S) his heirs, successors and assigns.

IN WITNESS WHEREOF, the GRANTOR (S) and GRANTEE (S) has executed this instrument this the _____, day of _____ , ____ 09.

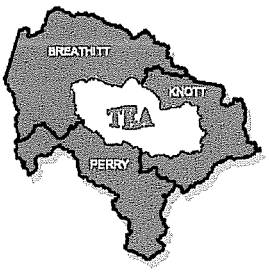
GRANTOR (S): _____

_____

GRANTEE (S): Troublesome Creek Environmental Authority (TEA)

_____

Lewis Warrix, Chairman



TroublesomeCreek
ENVIRONMENTAL AUTHORITY

c/o KRADD
917 Perry Park Road, Hazard, Kentucky 41701
Phone: (606) 436-3158 Fax: (606) 436-2144

December 10, 2009

David L. Armstrong
Chairman
Kentucky Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602-0615

RE: Ball Creek WWTP Funding Sources

Dear Chairman Armstrong:

The Troublesome Creek Environmental Authority is currently in the process of designing a Wastewater Treatment Plant to be located at Ball Creek in Knott County. The total project is estimated to cost $3,425,000. At present time the Authority has a $500,000 Interim Financing loan through KRWA, which has been expended on the design of the plant and collection lines. The Authority intends to pay off this loan using the $1,425,000 KIA Bond money that was awarded to them through HB608 for construction of the plant. The remainder of the grant will be applied to the construction costs.

In addition to the $1,425,000 from HB 608, the Authority has received confirmation on a $500,000 grant from the USACE Section 531 fund. The Authority is currently working with the Corp. of Engineers to process all necessary paperwork so that these funds may be expedited for release.

KIA also approved the CWSRF ARRA loan in the amount of $1,500,000 at its December board meeting. It is estimated that of the $1,500,000 only $718,000 will have to be repaid due to the principal forgiveness stipulation in the loan documents. The Knott County Fiscal Court is in full support of this project and has passed a resolution stating that it will seek Coal Severance funding to assist the Authority in repaying the loan within the next biennium. Total confirmed funding is $3,425,000, which is the total cost of the project.

If you have any questions or need further information, please feel free to contact me.

Thank you,

Jennifer McIntosh
Community Resources Planner/TEA Administrator
KY River Area Development District

ASSISTANCE AGREEMENT

BETWEEN

KENTUCKY RURAL WATER FINANCE CORPORATION

AND

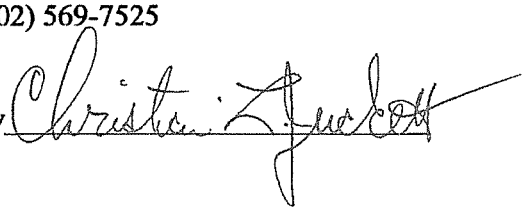
TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

DATED APRIL 8, 2009

IN THE AMOUNT OF $500,000

This document was prepared by:

RUBIN & HAYS
Kentucky Home Trust Building
450 South Third Street
Louisville, Kentucky 40202
(502) 569-7525

By 

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ASSISTANCE AGREEMENT

This Assistance Agreement made and entered into as of April 8, 2009 (the "Assistance Agreement") by and between the Kentucky Rural Water Finance Corporation, a non-profit corporation and instrumentality of the various entities of the Commonwealth of Kentucky (the "Issuer") and the Troublesome Creek Environmental Authority, Inc., a Kentucky nonprofit corporation, Hazard, Kentucky (the "Governmental Agency"):

WITNESSETH

WHEREAS, the Issuer has established its Public Projects Flexible Term Program (the "Program") designed to provide financing for the expansion, addition and improvements of public projects for governmental entities under which the Issuer issued its Kentucky Rural Water Finance Corporation Multimodal Public Projects Revenue Bonds (Flexible Term Program), Series 2001, dated April 4, 2001, in the aggregate principal amount of $46,000,000 (the "Series 2001 Bonds") pursuant to a Trust Indenture dated as of April 4, 2001 (the "Indenture") between the Issuer and Regions Bank, Nashville, Tennessee (as successor in interest to Fifth Third Bank and The Bank of New York Trust Company, N.A.), as trustee (the "Trustee"), the net proceeds of which will be applied for the benefit of such governmental entities by making loans, pursuant to Assistance Agreements; and

WHEREAS, pursuant to the Indenture, the Issuer has authorized the issuance of the Kentucky Rural Water Finance Corporation Public Projects Revenue Bonds (Flexible Term Program), Series 2009B (the "Series 2009B Bonds") in the aggregate principal amount of $3,720,000, pursuant to a Supplemental Trust Indenture No. 34, dated as of April 8, 2009 by and between the Issuer and the Trustee, which Series 2009B Bonds will rank on a parity with the Series 2001 Bonds and the proceeds of which will be used by certain Governmental Agencies to acquire, construct and equip public projects described in various Assistance Agreements by and between the Governmental Agencies and the Issuer; and

WHEREAS, the Counties of Knott, Breathitt and Perry, Kentucky (the "Counties"), acting jointly, have caused the creation and organization of the Governmental Agency under the provisions of Sections 273.161 through 273.390, 58.180 and 65.210 through 65.300 of the Kentucky Revised Statutes (the "KRS") as the corporate agency, instrumentality and constituted authority of the Counties for the performance of public, municipal, civic and governmental purposes pursuant to Kentucky law, such creation and organization having been carried out pursuant to the above cited statues and an Interlocal Cooperation Agreement entered into by the Counties under authority of KRS 65.210 through 65.300; and

WHEREAS, the Governmental Agency, presently owns and operates the sewer system (the "System") of said Governmental Agency; and

WHEREAS, the Governmental Agency has determined that it is necessary and desirable and in the public interest to finance improvements and extensions to the System (hereinafter more specifically defined as the "Project"), and the Issuer has determined that the Project is a

project within the meaning of the Act and the Indenture, thereby qualifying for financial assistance from the Issuer; and

WHEREAS, the Issuer has found and determined that the Project will be in furtherance of the purposes of the Issuer and the Governmental Agency under the Act; and

WHEREAS, the Governmental Agency has designated the Issuer as its instrumentality and agency; and

WHEREAS, pursuant to this Assistance Agreement the Governmental Agency will proceed with the Project; and

WHEREAS, it is deemed necessary and advisable for the best interests of the Governmental Agency that it enter into this Assistance Agreement with the Issuer in order to borrow funds (the "Loan") in the amount of $500,000 [the "Obligations"], for the purpose of providing funds for the Project; and

WHEREAS, under the provisions of Sections 58.010 through 58.140, inclusive, of the Kentucky Revised Statutes, the Governmental Agency is authorized to enter into this Assistance Agreement and to borrow the Obligations to provide such funds for the purpose aforesaid; and

WHEREAS, the Issuer is willing to cooperate with the Governmental Agency in making available the Loan pursuant to the Act and the Indenture to be applied to the Project upon the conditions hereinafter enumerated and the covenants by the Governmental Agency herein contained; and

WHEREAS, the Issuer and the Governmental Agency have determined to enter into this Assistance Agreement pursuant to the terms of the Act and the Indenture and to set forth their respective duties, rights, covenants, and obligations with respect to the construction and financing of the Project subject to the repayment of the Loan and the Obligations and the interest thereon;

NOW, THEREFORE, FOR AND IN CONSIDERATION OF THE MUTUAL COVENANTS HEREIN SET FORTH, THE LOAN HEREBY EFFECTED AND OTHER GOOD AND VALUABLE CONSIDERATION, THE RECEIPT OF WHICH IS HEREBY ACKNOWLEDGED BY EACH PARTY, THE PARTIES HERETO MUTUALLY COVENANT AND AGREE, EACH WITH THE OTHER AS FOLLOWS:

Section 1. Definitions. As used in this Assistance Agreement, unless the context requires otherwise:

"*Act*" refers to Chapter 58 of the Kentucky Revised Statutes.

"*Assistance Agreement*" refers to this Assistance Agreement authorizing the Loan and the Obligations.

"*Bond Counsel*" refers to Rubin & Hays, Kentucky Home Trust Building, 450 South Third Street, Louisville, Kentucky 40202, or any other nationally recognized individual or firm in the field of municipal bond law.

"*Bondowner*," "*Owner*," "*Bondholder*" means and contemplates, unless the context otherwise indicates, the registered owner of one or more of the Bonds at the time issued and outstanding hereunder.

"*Bonds*" refers to the Obligations and any additional Parity Bonds.

"*Certified Public Accountants*" refers to an independent Certified Public Accountant or firm of Certified Public Accountants, duly licensed in Kentucky and knowledgeable about the affairs of the System and/or of other Governmental Agency financial matters.

"*Code*" refers to the United States Internal Revenue Code of 1986, as amended, and any regulations issued thereunder.

"*Compliance Group*" refers to the Compliance Group identified and defined in the Indenture.

"*Engineer*" or "*Independent Consulting Engineer*" refers to an Independent Consulting Engineer or firm of Engineers of excellent national reputation or of recognized excellent reputation in Kentucky in the fields of waterworks and sewer engineering.

"*Governing Body*" means the Board of Directors of the Governmental Agency or such other body as shall be the governing body of said Governmental Agency under the laws of Kentucky at any given time.

"*Governmental Agency*" refers to the Troublesome Creek Environmental Authority, Inc., Hazard, Kentucky.

"*Governmental Agency Chief Executive*" refers to the Chairman of the Governmental Agency.

"*Governmental Agency Clerk*" refers to the Secretary of the Governmental Agency.

"*Indenture*" means the Trust Indenture, dated as of April 4, 2001, as originally executed or as it may from time to time be supplemented, modified or amended by any supplemental indenture, including the Supplemental Trust Indenture No. 34, dated April 8, 2009, by and between the Issuer and the Trustee.

"*Interest Payment Date*" shall mean February 1, 2010.

"*Issuer*" refers to the Kentucky Rural Water Finance Corporation, Bowling Green, Kentucky.

"*Obligations*" refers to the Loan authorized by this Assistance Agreement in the principal amount of $500,000, maturing February 1, 2010.

"*Outstanding Bonds*" refers collectively to the outstanding Obligations and any outstanding Parity Bonds, and does not refer to any Bonds that have been defeased.

"*Parity Bonds*" means bonds issued in the future, which will, pursuant to the provisions of this Assistance Agreement, rank on a basis of parity with the Obligations and shall not be deemed to include, nor to prohibit the issuance of, bonds ranking inferior in security to the Obligations.

"*Permanent Financing*" shall mean proceeds of temporary or permanent financing or other borrowing secured by revenues of the Governmental Agency of whatever nature or from any other legally available funds of the Governmental Agency, including, but not limited to long term financing issued under the Program or bonds issued by the Governmental Agency and delivered to a purchaser for the purpose of financing the costs of the Project.

"*Permitted Investments*" refers to investments of funds on deposit in the various funds created herein and includes:

(1) direct obligations of the United States of America (including obligations issued or held in book-entry form on the books of the Department of the Treasury of the United States of America) or obligations the timely payment of the principal of and interest on which are fully guaranteed by the United States of America, including instruments evidencing an ownership interest in securities described in this clause (1);

(2) obligations, debentures, notes or other evidences of indebtedness issued or guaranteed by any of the following:

Federal Home Loan Bank System, Export-Import Bank of the United States, Federal Financing Bank, Federal Land Banks, Government National Mortgage Association, Federal Home Loan Mortgage Corporation or Federal Housing Administration;

(3) repurchase agreements (including those of the Trustee or the Bank) fully secured by collateral security described in clause (1) or (2) of this definition, which collateral (a)is held by the Trustee or a third party agent during the term of such repurchase agreement, (b) is not subject to liens or claims of third parties and (c) has a market value (determined at least once every fourteen days) at least equal to the amount so invested;

(4) certificates of deposit of, or time deposits in, any bank (including the Trustee or the Bank) or savings and loan association (a) the debt obligations of which (or in the case of the principal bank of a bank holding company, the debt obligations of the bank holding company of which) have been rated at least equal to the rating assigned to the Bonds by each Rating Agency then rating the Bonds or (b) which are fully insured by the Federal Deposit Insurance Corporation or (c) which are secured at all times, in the manner and to the extent provided by law, by collateral security (described in clause (1) or (2) of this definition) of a market value (valued at least quarterly) of no less than the amount of money so invested;

(5) shares in any investment company registered under the Federal Investment Governmental Agency Act of 1940 whose shares are registered under the Federal Securities Act of 1933 and whose only investments are government securities described in clause (1) or (2) of this definition and repurchase agreements fully secured by government securities described in clause (1) or (2) of this definition and/or other obligations rated AAA by S&P;

(6) tax-exempt obligations of any state of the United States, or political subdivision thereof, which are rated AA or better by S&P or mutual funds invested only in such obligations;

(7) units of a taxable or nontaxable government money-market portfolio composed of U.S. Government obligations and repurchase agreements collateralized by such obligations;

(8) commercial paper rated A-1 or A-1+ by S&P;

(9) corporate notes or bonds with one year or less to maturity rated in one of the two highest Rating Categories by S&P; or

(10) shares of mutual funds, each of which shall have the following characteristics:

(i) The mutual fund shall be an open-end diversified investment company registered under the Federal Investment company Act of 1940, as amended;

(ii) The management company of the investment company shall have been in operation for at least five (5) years; and

(iii) All of the securities in the mutual fund shall be in investments in any one or more of the investments described in (1) and (3) above.

"*Program*" refers to the Issuer's Public Projects Flexible Term Program designed to provide financing for the expansion, addition and improvements of public projects for governmental entities.

"*Program Administrator*" refers to the Kentucky Rural Water Association, Inc., Bowling Green, Kentucky.

"*Program Reserve Fund*" refers to the Reserve Fund created and established pursuant to Section 4.2 of the Indenture.

"*Project*" refers to financing the construction of a wastewater treatment plant, with appurtenances, for the benefit of the System, with the proceeds of the Obligations.

"*Requisition Certificate*" means the form attached hereto as **Exhibit B** to be utilized by the Governmental Agency in obtaining disbursements of the Loan from the Governmental Agency Account for the Project.

"*System*" refers to the Governmental Agency's sewer system, together with all future extensions, additions and improvements to said System.

"*Treasurer*" refers to the Treasurer of the Governmental Agency.

"*Trustee*" refers to Regions Bank, Nashville, Tennessee.

"*U.S. Obligations*" refers to bonds, notes, or Treasury Bills which are direct obligations of the United States of America or obligations fully guaranteed by the United States of America, including book-entry obligations of the United States Treasury-State and Local Government Series, and Trust Receipts representing an ownership interest in direct obligations of the United States.

Section 2. Reaffirmation of Declaration of Sewer System. That all proceedings heretofore taken for the establishment of and the supplying of wastewater collection and treatment service in and to said Governmental Agency as a sewer system are hereby in all respects ratified and confirmed; and so long as any of the Obligations hereinafter authorized or permitted to be issued remain outstanding, said System shall be owned, controlled, operated and maintained for the security and source of payment of the Obligations. Said System is hereby declared to constitute a public project within the meaning and application of Sections 58.010 to 58.140, inclusive, of the Kentucky Revised Statutes.

Section 3. Authorization of Obligations; Place of Payment; Manner of Execution. That pursuant to the Constitution and laws of Kentucky, and particularly said Sections 58.010 to 58.140, inclusive of the Kentucky Revised Statutes, the Governmental

Agency hereby authorizes the borrowing of $500,000 from the Program, for the purpose of providing funds for the Project.

The Obligations shall mature on February 1, 2010, in such principal amount, and shall bear interest payable on the Interest Payment Date, in the maturities and at the interest rates set forth in **Exhibit A** attached hereto.

The principal of, redemption price, if any, and interest on the Obligations shall be payable in lawful money of the United States of America on the Interest Payment Date.

In the event the Issuer is required to withdraw moneys from the Program Reserve Fund established pursuant to the Indenture to pay the principal of and interest on the Obligations and any other payments due under this Assistance Agreement on behalf of the Governmental Agency (the "Reserve Withdrawal"), the Governmental Agency shall pay to the Trustee, in each month, pursuant to the ACH Debit Direct Payment Method an amount equal to at least 1/12 of the Reserve Withdrawal, plus accrued interest thereon at the rate equal to the highest rate of interest paid by the investments making up the Program Reserve Fund until such Reserve Withdrawal has been replenished.

Section 4. Redemption. The Obligations are not subject to optional redemption prior to their stated maturity.

Section 5. Recognition of Loan Guaranty. On February 18, 2009, the Fiscal Court of the County of Knott, Kentucky (the "County") adopted an ordinance whereby the County covenants that if for any reason the Governmental Agency fails to pay principal on the Obligations when due and payable, either at maturity or by proceedings for redemption, or fails to pay any installment of interest on the Loan when the same shall become due and payable, and the Governmental Agency fails to fulfill these obligations pursuant to the terms of this Assistance Agreement and to cure any such failure within 30 days after receipt of written notice of such failure, then the County covenants and agrees to take all action necessary to obtain temporary or permanent financing or other borrowing secured by a general obligation pledge of the tax revenues of the County of whatever nature or from any other legally available funds of the County, including, but not limited to general obligation bonds issued by the County for the purpose of paying in full the Obligations, plus any accrued interest or other costs associated with the Obligations, as soon as reasonably possible with the proceeds of such financing.

Section 6. Permanent Financing. The Governmental Agency does hereby covenant that if for any reason the anticipated funding for the payment of the principal and interest on the Obligations fails to be provided on or before the Maturity Date, the Governmental Agency shall take all action required to obtain Permanent Financing and shall retire the Obligations on or before the Maturity Date from the proceeds of Permanent Financing.

Section 7. Pledge and Assignment of the Governmental Agency; Further Assurance; Completion of the Project. The Governmental Agency does hereby irrevocably assign and pledge to the Issuer and its successors or assigns, for the benefit of the owners of all

bonds issued under the Indenture, all right, title and interest of the Governmental Agency in and to:

(a) A grant awarded in 2008 Kentucky General Assembly Regular Session House Bill 608 to the Governmental Agency, in the principal amount of $1,425,000 (the "Grant Proceeds") from the Commonwealth of Kentucky's Infrastructure for Economic Development Fund for Coal-Producing Counties; and

(b) To the extent that the aforementioned grant proceeds are not funded or are insufficient to pay the principal of and interest on the Obligations, when due, the proceeds of the Permanent Financing and all monies to be received from the purchaser of bonds issued pursuant to the Permanent Financing for the Project.

The Governmental Agency acknowledges and agrees that the Issuer, pursuant to the Indenture, has assigned and pledged to the Trustee for the benefit and security of the owners of the bonds issued under the Indenture all of its rights under the provisions of this Assistance Agreement and the Obligations. Accordingly, this Assistance Agreement shall not be terminated, modified or changed by the Issuer or the Governmental Agency except with the consent of the Trustee in the manner and subject to the conditions permitted by the terms and provisions of the Indenture.

At any time and all times the Governmental Agency shall, so far as it may be authorized by law, pass, make, do, execute, acknowledge and deliver, all and every such further resolutions, acts, deeds, conveyances, assignments, transfers and assurances as may be necessary or desirable for the better assuring, conveying, granting, assigning and confirming all and singular the rights, assets and revenues herein pledged or assigned, or intended so to be, or which the Governmental Agency may hereafter become bound to pledge or assign.

The Governmental Agency hereby covenants and agrees to take all steps reasonably necessary to obtain the Grant Proceeds on or before the Maturity Date and if the Governmental Agency has any reason to believe that it will not receive the Grant Proceeds on or prior to the Maturity Date, it covenants and agrees to proceed expeditiously with and promptly to obtain Permanent Financing on or prior to the Maturity Date.

Section 8. Disposition of Proceeds of the Obligations; Governmental Agency Account. Upon (i) the execution of this Assistance Agreement, (ii) the delivery of this Assistance Agreement to the Trustee, (iii) certification of the Compliance Group that the Loan is to be accepted into the Program, and (iv) upon receipt by the Governmental Agency of the proceeds of the Obligations, the proceeds shall be applied as follows:

(a) Disposition of the Proceeds. There shall first be deducted and paid from the proceeds of the Obligations the fees and costs incurred by the Governmental Agency and any other pertinent expenses incident to the issuance, sale and delivery of the Obligations and such other appropriate expenses as may be approved by the Governmental Agency Chief Executive,

EXHIBIT A

Debt Service Schedule

including but not limited to the Governmental Agency's pro rata share of the Program's fees and expenses.

The balance shall be deposited to the Governmental Agency Account to be used for the Project.

(b) Governmental Agency Account. It is hereby acknowledged that a fund entitled "Troublesome Creek Environmental Authority, Inc. Governmental Agency Account" (the "Governmental Agency Account") has been created and maintained by the Trustee pursuant to the Indenture; and the amount on deposit in said Governmental Agency Account shall be applied to the extent necessary, to pay the cost of the Project.

Investment income derived from investment of the Governmental Agency Account, which shall be invested in Permitted Investments in accordance with this Assistance Agreement, shall, as received, be deposited in the Governmental Agency Account.

The Trustee shall be obligated to send written notice to the Governmental Agency of the need for investment directions if and whenever funds in excess of $50,000 shall remain uninvested for a period of more than five days. In the absence of written direction from the Governmental Agency with respect to investment of moneys held in the Governmental Agency Account, the Trustee is hereby directed to invest funds in money market mutual funds of the Trustee or its affiliates that qualify as Permitted Investments under this Assistance Agreement.

Payment from the Governmental Agency Account for costs in connection with the Project shall be made only upon a Requisition Certificate delivered to the Trustee which has been approved by the Engineers having charge of supervising such acquisition, improvement and construction, and countersigned by the Governmental Agency Chief Executive, said Engineers to certify in each instance that the Requisition Certificate represents a sum actually earned by and due to the proposed payee under a contract with said Governmental Agency for work performed and/or materials furnished in connection with the Project, or represents a sum necessary to be expended for land and/or rights of way necessary to be acquired by the Governmental Agency in connection with said Project.

No expenditure shall be made from the Governmental Agency Account except for proper and authorized expenses relating to the acquisition, improvement and construction of the Project in accordance with the contracts, plans and specifications approved by the Governmental Agency.

After completion of the Project, as certified by the Engineers, any balance then remaining on deposit in the Governmental Agency Account shall, subject to any and all applicable legal provisions and applicable arbitrage regulations necessary to assure the exemption of interest on the Obligations from Federal income taxation, upon orders of the Governing Body, be transferred to an escrow fund to defease the Obligations pursuant to Section 13 hereof, if such (in the opinion of recognized Bond Counsel) will not cause the Bonds to be "arbitrage bonds".

Section 9. Arbitrage Limitations.

(a) The Governmental Agency covenants that neither the proceeds of the Obligations, nor "Non-Exempt Revenues" of the System, as defined below, will be invested in investments which will produce a net adjusted yield in excess of the net interest cost (effective yield) of the Obligations, if such investment would cause such Obligations to be treated as "arbitrage bonds" within the meaning of Section 148 of the Internal Revenue Code, as amended, and the applicable regulations thereunder; provided, however, that such proceeds and/or revenues may be invested to whatever extent and whenever the Code and/or applicable regulations permit same to be invested without causing the Obligations to be treated as "arbitrage bonds."

(b) "Non-Exempt Revenues" within the meaning of the foregoing shall be deemed to refer to revenues of the System deposited in any of the funds earmarked for or reasonably expected to be used for the payment of debt service on the Obligations, in excess of "Exempt Revenues," which Exempt Revenues are:

(1) amounts deposited in a sinking fund for the purpose of paying debt service on any Obligations against the System within thirteen (13) months from the date of deposit; and

(2) amounts deposited in a depreciation fund or any similar reserve for replacements, reasonably expected to be used for extensions, additions, improvements or replacements to the System, and not reasonably expected to be used to pay debt service (even if pledged to be used to pay debt service in the event of the unexpected inadequacy of other funds pledged for that purpose).

(c) If, and to the extent that any Non-Exempt Revenues are on deposit and are available for investment by reason of the foregoing, such funds shall be subject to the investment limitations set out in Subsection (a) above.

(d) On the basis of information furnished to the Governmental Agency, on known facts, circumstances and reasonable expectations on the date of enactment of this Assistance Agreement, the Governmental Agency certifies as follows:

(1) That it is not expected or contemplated that the proceeds of the Obligations will be used or invested in any manner which will cause any of the Obligations to be treated as "arbitrage bonds" within the meaning of Section 148 of the Code and the applicable regulations thereunder.

(2) That it is not expected or contemplated that the Governmental Agency will make any use of the proceeds of the Obligations, which, if such use had been reasonably anticipated on the date of issuance of the Obligations, would have caused the Obligations to be arbitrage bonds.

(3) That it is expected and contemplated that the Governmental Agency will comply with (i) all of the requirements of Section 148 of the Code; and (ii) all of the requirements of the applicable regulations thereunder, to whatever extent is necessary to assure that the Obligations will not be treated as arbitrage bonds.

(4) That it is anticipated that amounts on deposit in a sinking fund will be used within 13 months from the date of deposit for the payment of debt service on the outstanding Obligations payable from said sinking fund.

(5) That amounts accumulated in a sinking fund shall not exceed the limitations set forth in this Assistance Agreement.

(6) That it is not reasonably anticipated that amounts accumulated in a depreciation fund will be used for payment of debt service on any bonds payable from the revenues of the System, even though such depreciation fund will be so available if necessary to prevent a default in the payment of principal and interest on such bonds.

Prior to or at the time of delivery of the Obligations, the Governmental Agency Chief Executive and/or the Governmental Agency Treasurer are authorized to execute the appropriate certification with reference to the matters referred to above, setting out all known and contemplated facts concerning such anticipated investment of the proceeds of the Obligations, including the execution of necessary and/or desirable certifications of the type contemplated by the Code and applicable regulations, as amended, in order to assure that interest on the Obligations will be exempt from all federal income taxes and that the Obligations will not constitute or be treated as arbitrage bonds.

Section 10. Parity Bonds. The Obligations shall not be entitled to priority one over the other in the application of the income and revenues of the System, regardless of the time or times of their issuance, it being the intention that there shall be no priority among the Obligations, regardless of the fact they may be actually issued and delivered at different times, and provided further that the lien and security of and for any bonds or obligations hereafter issued that are payable from the income and revenues of the System, shall, except as set out herein, be subject to the priority of the Obligations as may from time to time be outstanding; provided the Governmental Agency does hereby reserve the right and privilege of issuing additional bonds from time to time payable from the income and revenues of the System ranking on a parity with the Obligations, but only under the conditions specified herein.

The Governmental Agency further reserves the right to add new sewer system facilities and/or to finance future extensions, additions and improvements to the System by the issuance of one or more additional series of Parity Bonds to be secured by a parity lien on and ratably payable on a parity with the Obligations, from the revenues of the System, provided:

(a) The facilities to be constructed from the proceeds of the additional Parity Bonds are made a part of the System and their revenues are pledged as additional security for the additional Parity Bonds and for the Outstanding Bonds.

(b) The Governmental Agency is in compliance with all covenants and undertakings in connection with all of the Outstanding Bonds.

(c) The annual net revenues (defined as gross revenues less operating expenses), of the then existing System for the Fiscal Year preceding the year in which such Parity Bonds are to be issued, adjusted as hereinafter provided, shall be certified by an independent Certified Public Accountant to be equal at least one hundred twenty percent (120%) of the average annual debt service requirements for principal and interest on all Outstanding Bonds payable from the revenues of the System, plus the anticipated debt service requirements of any Parity Bonds then proposed to be issued. The calculation of average annual debt service requirements of principal and interest on the additional Parity Bonds to be issued shall, regardless of whether such additional Parity Bonds are to be serial or term bonds, be determined on the basis of the principal of and interest on such Parity Bonds being payable in approximately equal annual installments.

(d) The annual net revenues referred to above may be adjusted for the purpose of the foregoing computations to reflect:

(1) any revisions in the System's schedule of rates or charges being imposed on or before the time of the issuance of any such additional Parity Bonds, and

(2) any increase in the annual net revenues to be realized from the proposed extensions, additions and improvements being financed (in whole or in part) by such additional Parity Bonds;

provided all such adjustments shall be based upon and included in a certification of an Independent Consulting Engineer.

(e) Compliance with Subsections (a) through (d) shall not be necessary for the issuance of Parity Bonds if the Governmental Agency has obtained the written consent of the Owners of all of the then Outstanding Bonds, and no other prerequisite need be complied with by the Governmental Agency in order to issue Parity Bonds.

The Governmental Agency reserves the right to issue parity bonds to refund or refinance any part or all of the Obligations, provided that prior to the issuance of such additional parity bonds for that purpose, there shall have been procured and filed with the Governmental Agency Clerk of the Governmental Agency a statement by a Certified Public Accountant, as defined herein, reciting the opinion based upon necessary investigation that:

(a) after the issuance of such parity bonds, the annual net revenues, as adjusted and defined above, of the then existing system for the fiscal year preceding the date of issuance of such Parity Bonds, after taking into account the revised debt service requirements resulting from the issuance of such Parity Bonds and from the elimination of the Bonds being refunded or refinanced thereby, are equal to not less than 120% of the average annual debt service requirements then scheduled to fall due in any fiscal year thereafter for principal of and interest

on all Outstanding Bonds payable from the revenues of the System, calculated in the manner specified above; or

(b) in the alternative, that the maximum annual debt service requirements for the Obligations, any previously issued Parity Bonds and the proposed refunding Parity Bonds, in any year of maturities thereof after the redemption of the Bonds scheduled to be refunded through the issuance of such proposed refunding Parity Bonds, shall not exceed the maximum annual debt service requirements applicable to the then outstanding Obligations and any previously issued Parity Bonds for any year prior to the issuance of such proposed Parity Bonds and the redemption of the Bonds to be refunded.

Section 11. Rates and Charges for Services of the System. While there are any Outstanding Bonds, the rates for all services of the System rendered by the Governmental Agency to its citizens, corporations, or others requiring the same, shall be reasonable and just, taking into account and consideration the cost and value of said System, the cost of maintaining and operating the same, the proper and necessary allowances for depreciation thereof, and the amounts necessary for the retirement of the Outstanding Bonds and the accruing interest on all such Outstanding Bonds as may be outstanding under the provisions of this Assistance Agreement, and there shall be charged such rates and amounts as shall be adequate to meet all requirements of the provisions of this Assistance Agreement. Prior to the issuance of the Obligations a schedule of rates and charges for the services rendered by the System to all users adequate to meet all requirements of this Assistance Agreement has been established and adopted.

The Governmental Agency covenants that it will not reduce the rates and charges for the services rendered by the System without first filing with the Governmental Agency Clerk a certification of an Independent Consulting Engineer or a Certified Public Accountant that the net income and revenues (as defined in Section 10 hereof) of the then existing System for the fiscal year preceding the year in which such reduction is proposed, as such annual net revenues are adjusted, after taking into account the projected reduction in annual net revenues anticipated to result from any such proposed rate decrease, are equal to not less than 120% of the average annual debt service requirements for principal and interest on all of the then Outstanding Bonds payable from the revenues of the System.

Section 12. All Obligations of this Issue Are Equal. The Obligations authorized and permitted to be issued hereunder, and from time to time outstanding, shall not be entitled to priority one over the other in the application of the income and revenues of the System regardless of the time or times of their issuance, it being the intention that there shall be no priority among the Obligations authorized or permitted to be issued under the provisions of this Assistance Agreement, regardless of the fact that they may be actually issued and delivered at different times.

Section 13. Defeasance and/or Refunding of Obligations. The Governmental Agency reserves the right, at any time, to cause the pledge of the revenues securing the outstanding Obligations to be defeased and released by paying an amount into an escrow fund

sufficient, when invested (or sufficient without such investment, as the case may be) in direct obligations of or obligations guaranteed by the United States of America, including book entry obligations and trust receipts representing an ownership in direct obligations of the United States of America, to assure the availability in such escrow fund of an adequate amount (a) to call for redemption and to redeem and retire all of such outstanding Obligations, both as to principal and as to interest, on the next or any optional redemption date, including all costs and expenses in connection therewith, and to pay all principal and interest falling due on the outstanding Obligations to and on said date, or (b) to pay all principal and interest requirements on the outstanding Obligations as same mature, without redemption in advance of maturity, the determination of whether to defease under (a) or (b) or both to be made by the Governing Body. Such Permitted Investments shall have such maturities as to assure that there will be sufficient funds for such purpose. If such defeasance is to be accomplished pursuant to (a), the Governmental Agency shall take all steps necessary to publish the required notice of the redemption of the outstanding Obligations and the applicable redemption date. Upon the proper amount of such investments being placed in escrow and so secured, such revenue pledge shall be automatically fully defeased and released without any further action being necessary.

Section 14. Contractual Nature of Assistance Agreement. The provisions of this Assistance Agreement shall constitute a contract between the Governmental Agency and the Issuer; and after the issuance of any of such Obligations, no change, variation or alteration of any kind in the provisions of this Assistance Agreement shall be made in any manner except as herein or therein provided until such time as all of the Obligations authorized thereby and the interest thereon have been paid or provided for in full, or as otherwise provided herein; provided (a) that the Governing Body may enact legislation for any other purpose not inconsistent with the terms of this Assistance Agreement, and which shall not impair the security of the Issuer and/or for the purpose of curing any ambiguity, or of curing, correcting or supplementing any defective or inconsistent provisions contained herein or in any ordinance or other proceedings pertaining hereto.

Section 15. Appointment and Duties of Trustee. The Trustee is hereby designated as the bond registrar and paying agent with respect to the Obligations.

Its duties as Trustee shall be as follows:

(a) To register all of the Obligations in the names of the Issuer;

(b) To cancel and destroy (or remit to the Governmental Agency for destruction, if so requested by the Governmental Agency) all exchanged, matured, retired and redeemed Obligations, and to maintain adequate records relevant thereto;

(c) To remit, but only to the extent that all required funds are made available to the Trustee by the Governmental Agency, semiannual interest payments directly to the Issuer's accounts for the Program;

(d) To notify the Issuer of any Obligations to be redeemed and to redeem Obligations prior to their stated maturity upon receiving sufficient funds; and

(e) To supply the Governmental Agency with a written accounting evidencing the payment of interest on and principal of the Obligations within thirty (30) days following each respective due date.

The Trustee shall be entitled to the advice of counsel and shall be protected for any acts taken by it in good faith in reliance upon such advice. The Trustee shall not be liable for any actions taken in good faith and believed by it to be within its discretion or the power conferred upon it by this Assistance Agreement, or the responsibility for the consequences of any oversight or error in judgment.

The Trustee may at any time resign from its duties set forth in this Assistance Agreement by filing its resignation with the Governmental Agency Clerk and notifying the Issuer. Thereupon, the Issuer shall notify the Governmental Agency of a successor Trustee which shall be an incorporated bank or trust company authorized to transact business in the United States of America. Notwithstanding the foregoing, in the event of the resignation of the Trustee, provision shall be made for the orderly transition of the books, records and accounts relating to the Obligations to the successor Trustee in order that there will be no delinquencies in the payment of interest or principal due on the Obligations.

Section 16. Provisions in Conflict Repealed. All ordinances, resolutions and orders, or parts thereof, in conflict herewith are, to the extent of such conflict, hereby repealed; and it is hereby specifically ordered and provided that any proceedings heretofore taken for the issuance of other bonds payable or secured in any manner by all or any part of the income and revenues of the System, or any part thereof, and which have not heretofore been issued and delivered, are hereby revoked and rescinded, and none of such other bonds shall be issued and delivered.

Section 17. Covenant of Governmental Agency to Take All Action Necessary to Assure Compliance with the Internal Revenue Code of 1986. In order to assure purchasers of the Obligations that interest thereon will continue to be exempt from federal and Kentucky income taxation (subject to certain exceptions set out below), the Governmental Agency covenants to and with the Issuer that (1) the Governmental Agency will take all actions necessary to comply with the provisions of the Code, (2) the Governmental Agency will take no actions which will violate any of the provisions of the Code, or would cause the Obligations to become "private activity bonds" within the meaning of the Code, (3) none of the proceeds of the Obligations will be used for any purpose which would cause the interest on the Obligations to become subject to federal income taxation, and the Governmental Agency will comply with any and all requirements as to rebate (and reports with reference thereto) to the United States of America of certain investment earnings on the proceeds of the Obligations.

The Governmental Agency reserves the right to amend this Assistance Agreement but only with the consent of the Issuer (i) to whatever extent shall, in the opinion of Bond Counsel, be deemed necessary to assure that interest on the Obligations shall be exempt from federal income taxation, and (ii) to whatever extent shall be permissible (without jeopardizing such tax exemption or the security of such owners) to eliminate or reduce any restrictions concerning the

investment of the proceeds of these Obligations, or the application of such proceeds or of the revenues of the System. The purchasers of these Obligations are deemed to have relied fully upon these covenants and undertakings on the part of the Governmental Agency as part of the consideration for the purchase of the Obligations. To the extent that the Governmental Agency obtains an opinion of nationally recognized bond counsel to the effect that non-compliance with any of the covenants contained in this Assistance Agreement or referred to in this Assistance Agreement would not subject interest on the Obligations to federal income taxes or Kentucky income taxes, the Governmental Agency shall not be required to comply with such covenants or requirements.

This Assistance Agreement is enacted in contemplation that Bond Counsel will render an opinion as to exemption of principal of the Obligations from Kentucky ad valorem taxation and as to exemption of interest on the Obligations from federal and Kentucky income taxation, based on the assumption by Bond Counsel that the Governmental Agency complies with covenants made by the Governmental Agency with respect to compliance with the provisions of the Code, and based on the assumption of compliance by the Governmental Agency with requirements as to any required rebate (and reports with reference thereto) to the United States of America of certain investment earnings on the proceeds of the Obligations. The Governmental Agency has been advised that based on the foregoing assumptions of compliance, Bond Counsel is of the opinion that the Obligations are not "arbitrage bonds" within the meaning of Section 148 of the Code.

Section 18. Insurance.

(a) Fire and Extended Coverage. If and to the extent that the System includes structures above ground level, the Governmental Agency shall, upon receipt of the proceeds of the sale of the Obligations, if such insurance is not already in force, procure fire and extended coverage insurance on the insurable portion of all of the facilities of the System, of a kind and in such amounts as would ordinarily be carried by private companies or public bodies engaged in operating a similar utility.

The foregoing fire and extended coverage insurance shall be maintained so long as any of the Obligations are outstanding and shall be in amounts sufficient to provide for not less than full recovery whenever a loss from perils insured against does not exceed eighty percent (80%) of the full insurable value of the damaged facility.

In the event of any damage to or destruction of any part of the System the Governmental Agency shall promptly arrange for the application of the insurance proceeds for the repair or reconstruction of the damaged or destroyed portion thereof.

(b) Liability Insurance on Facilities. So long as any of the Obligations are outstanding, the Governmental Agency shall, procure and maintain, public liability insurance relating to the operation of the facilities of the System, with limits of not less than $200,000 for one person and $1,000,000 for more than one person involved in one accident, to protect the Governmental Agency from claims for bodily injury and/or death; and not less than $200,000

from claims for damage to property of others which may arise from the Governmental Agency's operations of the System and any other facilities constituting a portion of the System.

(c) Vehicle Liability Insurance. If and to the extent that the Governmental Agency owns or operates vehicles in the operation of the System, upon receipt of the proceeds of the Obligations, the Governmental Agency shall, if such insurance is not already in force, procure and maintain, so long as any of the Obligations are outstanding, vehicular public liability insurance with limits of not less than $200,000 for one person and $1,000,000 for more then one person involved in one accident, to protect the Governmental Agency from claims for bodily injury and/or death, and not less than $200,000 against claims for damage to property of others which may arise from the operation of such vehicles by the Governmental Agency.

Section 19. Event of Default; Remedies. The following items shall constitute an "Event of Default" on the part of the Governmental Agency:

(a) The failure to pay principal on the Obligations when due and payable, either at maturity or by proceedings for redemption;

(b) The failure to pay any installment of interest on the Obligations when the same shall become due and payable;

(c) The failure of the Governmental Agency to fulfill any of its obligations pursuant to this Assistance Agreement and to cure any such failure within 30 days after receipt of written notice of such failure; and/or

(d) The failure to promptly repair, replace or reconstruct essential facilities of the System after any major damage and/or destruction thereof.

Upon the occurrence of an Event of Default, the Issuer or the Trustee on its behalf, as owner of the Obligations, may enforce and compel the performance of all duties and obligations of the Governmental Agency as set forth herein. Upon the occurrence of an Event of Default, then, upon the filing of suit by the Trustee or the Issuer, any court having jurisdiction of the action may appoint a receiver to administer the System on behalf of the Governmental Agency, with power to charge and collect rates sufficient to provide for the payment of the principal of and interest on the Obligations, and for the payment of operation and maintenance expenses of the System, and to provide and apply the income and revenues in conformity with this Assistance Agreement and with the laws of the Commonwealth of Kentucky.

In addition to and apart from the foregoing, upon the occurrence of an Event of Default, the owner of any of the Obligations may require the Governmental Agency by demand, court order, injunction, or otherwise, to raise all applicable rates charged for services of the System a reasonable amount, consistent with the requirements of this Assistance Agreement.

Section 20. Annual Reports. The Governmental Agency hereby agrees to provide or cause to be provided to the Issuer and the Compliance Group audited financial statements

prepared in accordance with generally accepted accounting principles (commencing with the fiscal year ended June 30, 2009) and such other financial information and/or operating data as requested by the Issuer or the Compliance Group.

The annual financial information and operating data, including audited financial statements, will be made available on or before 120 days after the end of each fiscal year (June 30).

Section 21. Supplemental Assistance Agreement. The Governmental Agency may, but only with the consent of the Issuer, execute one or more supplemental Assistance Agreements as shall not be inconsistent with the terms and provisions hereof for any one or more of the following purposes:

(a) to cure any ambiguity or formal defect or omission in this Assistance Agreement;

(b) to subject to the lien and pledge of this Assistance Agreement additional revenues, properties, or collateral which may legally be subjected;

(c) to add to the conditions, limitations and restrictions on the issuance of bonds, other conditions, limitations and restrictions thereafter to be observed;

(d) to add to the covenants and agreements of the Governmental Agency in this Assistance Agreement, other covenants and agreements thereafter to be incurred by the Governmental Agency or to surrender any right or power herein reserved to or conferred upon the Governmental Agency;

(e) to effect the issuance of additional Parity Bonds; and/or

(f) to modify the terms and conditions of this Assistance Agreement at the request of the Issuer in order to assist the Issuer in operating the Program or to maintain any rating the Issuer may have on its Program obligations.

Section 22. No Remedy Exclusive. No remedy herein conferred upon or reserved to the Issuer is intended to be exclusive, and every such remedy will be cumulative and will be in addition to every other remedy given hereunder and every remedy now or hereafter existing at law or in equity. No delay or omission to exercise any right or power accruing upon any default will impair any such right or power and any such right and power may be exercised from time to time and as often as may be deemed expedient.

Section 23. Waivers. In the event that any agreement contained herein should be breached by either party and thereafter waived by the other party, such waiver will be limited to the particular breach so waived and will not be deemed to waive any other breach hereunder.

Section 24. Agreement to Pay Attorneys' Fees and Expenses. In the event that either party hereto shall become in default under any of the provisions hereof and the non-defaulting party employs attorneys or incurs other expenses for the enforcement of performance or observance of any obligation or agreement on the part of the defaulting party herein contained, the defaulting party agrees that it will pay on demand therefore to the non-defaulting party the fees of such attorneys and such other expenses so incurred by the non-defaulting party.

Section 25. Signatures of Officers. If any of the officers whose signatures or facsimile signatures appear on this Assistance Agreement or any other document evidencing the Obligations cease to be such officers before delivery of the Obligations, such signatures shall nevertheless be valid for all purposes the same as if such officers had remained in office until delivery, as provided by KRS 58.040 and KRS 61.390.

Section 26. Severability Clause. If any section, paragraph, clause or provision of this Assistance Agreement shall be held invalid, the invalidity of such section paragraph, clause or provision shall not affect any of the remaining provisions of this Assistance Agreement.

IN WITNESS WHEREOF, the Kentucky Rural Water Finance Corporation has caused this Assistance Agreement to be signed in its name by its President and attested by its Secretary/Treasurer and the Troublesome Creek Environmental Authority, Inc. has caused this Assistance Agreement to be signed in corporate name and by its officer thereunder duly authorized, all as of the day and year first above written.

KENTUCKY RURAL WATER FINANCE CORPORATION

By _____
President

Attest:

_____
Secretary/Treasurer

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

By _____
Chairman

Attest:

_____
Secretary

IN WITNESS WHEREOF, the Kentucky Rural Water Finance Corporation has caused this Assistance Agreement to be signed in its name by its President and attested by its Secretary/Treasurer and the Troublesome Creek Environmental Authority, Inc. has caused this Assistance Agreement to be signed in corporate name and by its officer thereunder duly authorized, all as of the day and year first above written.

KENTUCKY RURAL WATER FINANCE CORPORATION

By _____
President

Attest:

_____
Secretary/Treasurer

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

By _____
Chairman

Attest:

_____
Secretary

IN WITNESS WHEREOF, the Kentucky Rural Water Finance Corporation has caused this Assistance Agreement to be signed in its name by its President and attested by its Secretary/Treasurer and the Troublesome Creek Environmental Authority, Inc. has caused this Assistance Agreement to be signed in corporate name and by its officer thereunder duly authorized, all as of the day and year first above written.

KENTUCKY RURAL WATER FINANCE CORPORATION

By _____
President

Attest:

_____
Secretary/Treasurer

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

By _____
Chairman

Attest:

_____
Secretary

RESOLUTION

AT THE REGULAR MEETING OF THE KNOTT COUNTY FISCAL COURT HELD IN THE FISCAL COURT MEETING ROOM IN THE OLD COURTHOUSE ON THE 16TH DAY OF SEPTEMBER 2009 AT THE HOUR OF 5:30 PM THE FOLLOWING RESOLUTION WAS OFFERED:

A RESOLUTION TO AUTHORIZE THE USE OF COAL SEVERANCE FUNDS TO RETIRE THE DEBT OF THE TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY BALL CREEK WASTE WATER TREATMENT PLANT AND SEWER COLLECTION PROJECT

WHEREAS, the Troublesome Creek Environmental Authority has received and Economic Stimulus Funding Loan in the amount of $750,000.00 to construct a waste water treatment plant and sewer collection system in the Ball Creek area, and

WHEREAS, the Fiscal Court desires to support this project by appropriating and requesting Coal Severance Funds from the next two bienniums to retire this debt.

NOW THEREFORE, be it resolved by the Knott County Fiscal Court that Judge-Executive Randy Thompson be authorized to sign and execute all documentation necessary to appropriate and request Coal Severance Funds totaling $750,000.00 to retire the debt for the Economic Stimulus Funding Loan of the Troublesome Creek Environmental Authority for the purpose of constructing a waste water treatment plant and sewer collection system in the Ball Creek area.

Motion for adoption of this resolution was made by Kirby Hall, seconded by Hashel Ritchie, and vote taken as follows:

FOR	AGAINST
Hashel Ritchie	
Joe Short	
Wade Noble	
Kirby Hall	

THEREUPON, said motion was declared passed and the resolution adopted, this 16th day of September 2009.

Attest:
By: _____
Clerk of the Fiscal Court of Knott County

_____
Judge/Executive

KENTUCKY RURAL WATER FINANCE CORPORATION FLEXIBLE TERM FINANCE PROGRAM SERIES 2009 B

Borrower: **Troublesome Creek Environmental Authority**
Closing Date: **04/08/09**

Borrower Payment Schedule

Payment Date	Principal	Interest Rate	Interest	Capitalized Interest	Trustee Fees	Total	Fiscal Total
04/08/09							
08/01/09			3,531.25	(3,531.25)		0.00	0.00
02/01/10	500,000.00	2.250%	5,625.00	(5,625.00)	350.00	500,350.00	
08/01/10			0.00			0.00	500,350.00
Totals	500,000.00		9,156.25	(9,156.25)	350.00	500,350.00	

EXHIBIT B

REQUISITION CERTIFICATE

Request No. _____ Dated _____

To: Regions Bank
Corporate Trust Department
315 Deaderick Street, 2nd Floor
Nashville, TN 37237
Fax Number: 615-770-4350

From: Troublesome Creek Environmental Authority, Inc. ("Governmental Agency")
Contact Person: Mr. _____, Chairman
_____
_____

Re: Loan in the amount of $500,000, dated April 8, 2009, to the Troublesome Creek Environmental Authority, Inc. from the Kentucky Rural Water Finance Corporation Public Projects Revenue Bonds (Flexible Term Program), Series 2009B.

Ladies and Gentlemen:

1. That _____ (the "Payee") is due the sum of $_____, which represents an amount duly earned by and payable to said Payee, its successors or assigns, for labor, materials, work and/or services detailed in the attached Exhibits and furnished under an existing contract with the above identified Governmental Agency, relating to the "Project" (as described in the Assistance Agreement between the Governmental Agency and the Kentucky Rural Water Finance Corporation) financed by the issuance of the above-identified Loan, and that if such sum is for materials and/or supplies furnished, such materials and/or supplies have been received, and if for services, such services have been performed;

2. That the Payee has expended or is expending concurrently with the delivery of this Certificate, the amount set out above on account of the cost of the Project, and that no Requisition Certificate with respect to such expenditure has previously been delivered to Regions Bank, Nashville, Tennessee, as Trustee;

3. That the undersigned are presently the persons who have been duly designated to execute this Requisition Certificate in connection with such Project, and that the authority of the undersigned to do so has not been canceled, revoked, rescinded, changed or altered in any manner.

Respectfully submitted,

TROUBLESOME CREEK
ENVIRONMENTAL AUTHORITY, INC.

By _____
Chairman

Certificate of Consulting Engineers as to Payment Request

The undersigned, a duly qualified and licensed Engineer hereby certifies that he or she represents the Governmental Agency submitting this request and that all expenses represented in this request were duly incurred for the construction of the "Project," and that such expenses have not been the subject of any request for disbursement previously submitted.

Engineer/Consultant

Firm Name _____

By _____

Title _____

R.M. Johnson Engineering
P.O. Box 444
Hindman, Kentucky 41822

CONSTRUCTION COST ESTIMATE

Project : TEA - Ball Creek Sewer Project, Phase I
Date : 06/09/09 **Job No. :**
Est. By : SRH **Checked By : RMJ**
DRAWING NO. :

ALTERNATE #2 0.10 MGD SBR with Concrete Tanks & Low Flow FM	QUANTITY NO. OF UNITS	QUANTITY UNIT MEAS.	COST PER UNIT		TOTAL COST
SEWER COLLECTION					
8" PVC Gravity Sewer Pipe, SDR 35	4,500	LF	$ 35.00		$ 157,500.00
6" PVC Gravity Sewer Pipe, SDR 35	1,250	LF	$ 20.00		$ 25,000.00
6" PVC Sewer Cleanouts	20	LF	$ 100.00		$ 2,000.00
8" X 6" Tees or Wyes	20	EA	$ 70.00		$ 1,400.00
Sanitary Sewer Manhole, 4' - 8' Deep	5	EA	$ 2,500.00		$ 12,500.00
Sanitary Sewer Manhole, 8' - 12' Deep	10	EA	$ 2,850.00		$ 28,500.00
Sanitary Sewer Manhole, 12'+ Deep	5	EA	$ 3,200.00		$ 16,000.00
4" HDPE Force Main, SDR 17	23,000	LF	$ 12.00		$ 276,000.00
2" HDPE Force Main, SDR 17	23,000	LF	$ 6.50		$ 149,500.00
Pump Station w/ Telemetry	1	EA	$ 75,000.00		$ 75,000.00
Odor Control for Pump Station	1	EA	$ 20,000.00		$ 20,000.00
Residential Grinder Pump Station (Complete)	30	EA	$ 3,500.00		$ 105,000.00
Air/Vacuum Relief Assembly	10	EA	$ 2,500.00		$ 25,000.00
Sanitary Sewer Creek Crossing	400	LF	$ 65.00		$ 26,000.00
Concrete Replacement	250	SY	$ 20.00		$ 5,000.00
Asphalt Pavement Replacement	5,000	SY	$ 25.00		$ 125,000.00
12" Bored Steel Encasement	1,000	LF	$ 125.00		$ 125,000.00
WWTP & SITE FACILITIES					
Erosion & Sediment Control	1	LS	$ 10,000.00		$ 10,000.00
3-Phase Power to WWTP Site	1	LS	$ 50,000.00		$ 50,000.00
WWTP Power Generator	1	EA	$ 125,000.00		$ 125,000.00
WWTP Site Preparation	1.5	AC	$ 50,000.00		$ 75,000.00
JetTech SBR Equipment	1	EA	$ 388,500.00		$ 388,500.00
Onsite Piping Installation	1	LS	$ 30,000.00		$ 30,000.00
Fiberglass Walkway Grating	900	SF	$ 25.00		$ 22,500.00
4 - 20' X 20' X 20' CIP Concrete SBR Basins	460	CY	$ 600.00		$ 276,000.00
Influent Screening	1	EA	$ 90,000.00		$ 90,000.00
Ultraviolet Disinfection	1	LS	$ 90,000.00		$ 90,000.00
Post Aeration	1	LS	$ 65,000.00		$ 65,000.00
Sludge Handling	1	LS	$ 65,000.00		$ 65,000.00
Telemetry	1	LS	$ 40,000.00		$ 40,000.00
6' Chain Link Security Fencing	600	LF	$ 35.00		$ 21,000.00
6' Chain Link Security Gate	1	EA	$ 1,500.00		$ 1,500.00
CL 1 Asphalt Base 0.75D PG64-22	90	TON	$ 70.00		$ 6,300.00
DGA Base	225	TON	$ 25.00		$ 5,625.00
Onsite WWTP Pumping Station	1	LS	$ 35,000.00		$ 35,000.00
Site Lighting	1	LS	$ 3,000.00		$ 3,000.00
Water Meter Installation (Basin, Meter, Setter, PRV)	1	EA	$ 500.00		$ 500.00
Potable Water Plumbing	1	LS	$ 2,500.00		$ 2,500.00
Seeding & Cleanup	1.5	AC	$ 5,000.00		$ 7,500.00
Office Trailor & Laboratory Equipment	1	LS	$ 70,000.00		$ 70,000.00
SUBTOTAL AMOUNT					**$ 2,654,325.00**
7% CONST. CONTINGENCY					**$ 186,885.00**
PRELIMINARY ENGINEERING					**$ 25,000.00**
ENGINEERING DESIGN		**7.37%**			**$ 195,590.00**
RESIDENT INSPECTION		**5.21%**			**$ 138,200.00**
ADDITIONAL ENGINEERING					**$ 105,000.00**
ADMINISTRATION					**$ 40,000.00**
LEGAL and LAND					**$ 80,000.00**
TOTAL ESTIMATED CONSTRUCTION COST					**$ 3,425,000.00**

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY

INITIAL OPERATIONAL COSTS BUDGET

BALL CREEK SEWER PROJECT - PHASE I (SX21119810)

		MONTHLY	YEARLY
A DEBT SERVICE COSTS	(Footnote A)	$0	$0

B OPERATION & MAINTENANCE EXPENSES

PERSONNEL

WAGES	(1) FT Employee @ $14.50/Hour	$2,513	$30,160
TAXES	FICA	$192	$2,307
	Unemployment Insur	$22	$260
BENEFITS	Health Insurance	$700	$8,400
	Life Insurance	$9	$108
	LTD Insurance	$6	$72
	Workman's Compensation ($3.22/$100)	$81	$971
SUBTOTAL PERSONNEL		$3,523	$42,278

VEHICLE

Lease Payment	4WD Utility pickup w / hoist mounted on back	$500	$6,000
Fuel	200 miles/wk (18 miles/gal) @ $2.65/Gal	$128	$1,531
Maintenance	Estimated @ $150/month	$200	$2,400
Insurance		$100	$1,200

LAB EXPENSES

Per ASA Quote		$128	$1,536

CHEMICALS

(Polymer for dewatering sludge)

Estimate 3 to 6 gallons polymer/month @ $20/gallon		$90	$1,080

ELECTRICITY

Sewer Treatment Plant		(Manufacturer's Est)	$2,240	$26,878
Lift Station		(Manufacturer's Est)	$106	$1,266

MAINTENANCE

Routine Parts / Repairs to System Equipment ($500 / month)		$500	$6,000

O & M RESERVE PAYMENTS

Annual Transfers to O&M Reserve Account		$150	$1,800

ADMINISTRATIVE

Billing expenses		200 Cust @ $.70/month	$140	$1,680
Other admininstrative support services		($200 / month)	$200	$2,400

CONTRACT OPERATIONS FEE (Footnote B)		$668	$8,012
TOTAL OPERATIONS EXPENSES:		**$8,672**	**$104,062**

PROJECTED CUSTOMERS W/IN 1ST YEAR OF OPERATION (.C)	*214*	*214*
OPERATIONS COST PER CUSTOMER	*$40.52*	*$486.27*

BALL CREEK SEWER PROJECT: PHASE I

FOOTNOTES:

A Long Term Debt: To best assure the success of the regional watershed approach promoted by the Kentucky Division of Water and EPA and formally adopted by Knott, Perry and Breathitt Counties in the establishment of the Troublesome Creek Environmental Authority, the Knott County Fiscal Court has committed $750,000 of County Coal Severance Funds to retire the debt associated with the KIA-ARRA award to the project.

B Troublesome Creek Environmental Authority has determined that operation of the system will be most efficiently performed by a private contractor and has procured the services of Utility Management Group in that context.

C Projected Customer Calculations: Phase I

Existing residential customers	93
New Commercial customers (residential equivalent)	81
(See footnote D below)	
New residential customers (See footnote E below)	40
Total Customer count / Year I (residential equivalent)	214

D New Commercial Customers (at Chestnut Mountain Development):

	Average Gallons/Day	Residential Equivalent (# Customers)
McDonalds Restaurant	1,000	8
CR Snow Tubing Park	1,500	11
4 Cinema Movie Theatre	3,200	24
Hotel (w/average occupancy of 60 guests/day	3,600	27
Convenience Store	1,500	11
Totals for new commercial customers:	10,800	81

Note: Residential equivalent based on 4,000 gallons per month usage.

E New Residential Customers (at Chestnut Mountain Development), per commitment from Western Pocahontas Properties.

ANNUAL ELECTRIC MOTOR COST/USAGE FOR BALL

UTILITY CHARGE (cKWH)	$7.708cKWH
SERVICE CHARGE	$13.50/month

SPECIFIC MOTORS	HORSEPOWER/LOAD	AVERAGE RUN TIME
A) ON SITE LIFT STATION	1-1HP @ 208V THREE PHASE	3
B) SLUDGEMATE MIXING	1-1HP @ 208V THREE PHASE	6
C) POST AERATION BLOWERS	1-3HP @ 208V THREE PHASE	9
D) ULTRAVIOLET DISINFECTANT	11,000W @ 208V THREE PHASE	6
E) SBR EQUIPMENT - CAM	1-25HP @ 208V THREE PHASE	17.5
a) PRE-EQ TRANSFER PUMP	1-2.4HP @ 208V THREE PHASE	6
b) PRE-EQ AERATOR	1-3HP @ 208V THREE PHASE	6
c) SBR TRANSFER PUMP	1-2.4HP @ 208V THREE PHASE	6
d) DIGESTOR AERATOR	1-10HP @ 208V THREE PHASE	8
e) DIGESTOR SLUDGE PUMP	1-2.4HP @ 208V THREE PHASE	4
F) HEADWORKS	1-2HP @ 208V THREE PHASE	12
	1-3HP @ 208V THREE PHASE	12
G) OFF SITE LIFT STATION	1-2HP @ 208V THREE PHASE	12
H) LIGHTING	18-250WATT POLE LIGHTS	10
I) GENERAL MISC. LOADS (SECURITY, ETC)	SINGLE PHASE LOADS	8

. CREEK WWTP

PER DAY (HRS.)	ENERGY USAGE (KW)	HOURS PER YEAR	COST PER YEAR
	1.73	1095	$146.02
	1.73	2190	$292.03
	3.96	3285	$1,002.70
	11	2190	$1,856.86
	28.15	6388	$13,859.61
	3.42	2190	$577.31
	3.96	2190	$668.47
	3.42	2190	$577.31
	11.6	2920	$2,610.85
	1.44	1460	$162.05
	2.81	4380	$948.69
	3.96	4380	$1,336.94
	2.81	4380	$948.69
	4.5	3650	$1,266.04
	7.68	2920	$1,728.57

TOTAL:		$27,982.13
SERVICE CHARGE/MONTH		$13.50
TOTAL BILL PER YEAR	**$**	**28,144.13**
TOTAL BILL PER MONTH	**$**	**2,345.34**

Agreement For
Planning Assistance and Owner Representation

THIS AGREEMENT is entered into this 29th day of January 2008, by and between

The Troublesome Creek Environmental Authority, Inc. with its principal address at 917 Perry Park Road, Hazard, KY 41701 (hereinafter "AUTHORITY")

and

Utility Management Group, LLC, with its principal address at 158 Town Mountain Road, Pikeville, KY 41501 (hereinafter "UMG").

WHEREAS, AUTHORITY plans to provide for the development, financing and construction of wastewater treatment plants and collection systems, and

WHEREAS, AUTHORITY desires to employ the services of UMG in the planning of these facilities and representation of the owner during the design and construction process, and UMG desires to perform such services for the compensation provided for herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, AUTHORITY and UMG agree as follows:

1 General

1.1 All land, buildings, facilities, easements, licenses, rights-of-way, equipment and vehicles presently or hereinafter acquired or owned by AUTHORITY shall remain the exclusive property of AUTHORITY unless specifically provided for otherwise in this Agreement.

1.2 This Agreement shall be governed by and interpreted in accordance with the laws of the State of Kentucky.

1.3 This Agreement shall be binding upon the successors and assigns of each of the parties, but neither party shall assign this Agreement without the prior written consent of the other party. Consent shall not be unreasonably withheld.

1.4 All notices shall be in writing and transmitted to the party's address stated above. All notices shall be deemed effectively given when delivered, if delivered personally or by courier mail service (i.e. Federal Express or Airborne Express), delivered after such notice has been deposited in the United States mail postage

prepaid, if mailed certified or registered U.S. mail, return receipt requested; or received by the party for which notice is intended if given in any other manner.

1.5 This Agreement is the entire Agreement between the parties. This Agreement may be modified only by written agreement signed by both parties. Wherever used, the terms "UMG" and "AUTHORITY" shall include the respective officers, agents, directors, elected or appointed officials and employees and, where appropriate, subcontractors or anyone acting on their behalf.

1.6 If any term, provision, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

1.7 It is understood that the relationship of UMG to the AUTHORITY is that of independent contractor. The services provided under this Agreement are of a professional nature and shall be performed in accordance with good and accepted industry practices for contract operators similarly situated. However, such services shall not be considered engineering services and nothing herein is intended to imply that USFOS is to supply professional engineering services to AUTHORITY unless specifically stated in this Agreement or an amendment to this contract to the contrary.

1.8 If any litigation is necessary to enforce the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees which are directly attributed to such litigation in addition to any other relief to which it may be entitled.

1.9 Nothing in this Agreement shall be construed to create in any third party or in favor of any third party any right(s), license(s), power(s) or privilege(s).

1.11 Prior to the commencement of work under this Agreement, each party shall designate in writing an employee or other representative of the designating party who shall have full authority to approve changes in the Scope of Work and compensation therefore, execute written Change Orders reflecting such changes, render decisions promptly, and furnish information expeditiously to the other party when necessary.

1.12 This Agreement shall be interpreted in accordance with its plain meaning and not strictly for or against either party hereto.

2 UMG's Responsibilities:

2.1 UMG will coordinate with AUTHORITY and other professionals in planning the incremental development of AUTHORITY facilities, obtaining financing, and

subsequently serve as the AUTHORITY's representative on-site during the construction phase of each facility.

2.2 UMG will assign staff to the AUTHORITY who have the ability to assist in planning and representing the AUTHORITY in the design and construction of wastewater plants, pumping stations, collection systems and alternative wastewater treatment systems.

2.3 UMG shall have appropriate and qualified staff attend each AUTHORITY meeting when timely notified of such meeting.

2.4 UMG will assist AUTHORITY in the context of any meetings with state, federal or other governmental or private agencies for the purpose of funding, designing, and constructing facilities or providing input regarding operation of such facilities.

2.5 As required by law, permit, or court order, UMG will prepare reports and submit them to AUTHORITY for signature and transmittal to appropriate authorities.

3 AUTHORITY'S Responsibilities:

3.1 AUTHORITY shall inform UMG in a timely manner of the time, place, and purpose of meetings that UMG needs to attend.

3.2 AUTHORITY shall have a central point of contact for UMG to phone, email or otherwise communicate questions, concerns, and requests related to Project activities.

3.3 AUTHORITY shall be responsible for costs associated with general administration of the Project including services of auditors, lawyers, engineers, as well as liability insurance and other administrative expenses.

3.4 AUTHORITY shall readily and in good faith negotiate price and scope changes with UMG in the context of Project expansion and changes in the nature of UMG's responsibilities.

4 Compensation

4.1 UMG's compensation under this Agreement shall be based on an Hourly Fee.

4.2 The Hourly Fee for the period beginning November 1, 2006 and ending December 31, 2007 shall be $110.00 (one hundred and ten dollars).

4.3 Billed hours for each month shall be due and payable on the first day of the month following the month in which the services were provided.

4.4 All other compensation to UMG is due within 15 days of the receipt by the AUTHORITY of UMG's invoice.

4.5 AUTHORITY shall pay interest at an annual rate equal to the Community Trust Bank's prime rate on payments not made on a timely basis, such interest being calculated from the due date of the payment. In the event the charges hereunder might exceed any limitation provided by law, such charges shall be reduced to the highest rate or amount within such limitation.

5 Scope Changes

5.1 A change in scope of services shall occur when and as UMG's costs of providing services under this Agreement change as a result of:

a. An increase in personnel required to be responsive to expanded contract responsibilities.

b. Any additional contract responsibilities assumed by UMG and not identified in this initial agreement (ie: operations and management of constructed facilities).

c. AUTHORITY'S request of and UMG'S consent to provide any additional services.

6. Indemnity, Liability, and Insurance

6.1 Neither UMG nor the AUTHORITY shall be liable to the other in any action or claim for consequential or special damages, loss of profits, loss of opportunity, loss of product, or loss of use. Any protection against liability for losses or damages afforded any individual or entity by these terms shall apply, whether the action in which recovery of damages is sought based on contract, tort (including sole, concurrent or other negligence and strict liability of any protected individual or entity), statute or otherwise. To the extent permitted by law, any statutory remedies that are inconsistent with these terms, are waived.

6.2 Indemnity agreements provided for in this agreement shall survive the termination of the agreement.

7 Term, Termination and Default

7.1 The initial term of this Agreement shall be three (3) years, commencing November 1, 2006. Thereafter, this Agreement shall be automatically renewed for successive terms of three (3) years each unless cancelled in writing by either party no less than one hundred and twenty (120) days prior to expiration.

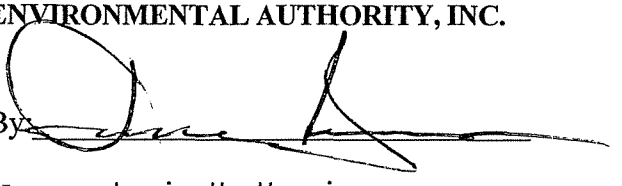
7.2 A party may terminate this Agreement only for a material breach of the Agreement by the other party; only after giving written notice of breach; and, except in the case of a breach by AUTHORITY for non-payment of UMG's invoices (in which case termination may be immediate by UMG), only after allowing the other party thirty (30) days to cure or taking reasonable steps to cure the breach.

8 Disputes and Force Majeure:

Neither party shall be liable for its failure to perform its obligations under this Agreement if such failure is due to any unforeseen circumstances beyond its reasonable control or force majeure. However, this section may not be used by either party to avoid, delay or otherwise affect any payments due to the other party.

Both parties indicate their approval of this Agreement by their signatures below, and each party warrants that all corporate or governmental action necessary to bind the parties to the terms of this Agreement has been and will be taken.

THE TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

By: 

Name: Lewis H. Warrix

Title: Chairman

Date: 1/29/08

UTILITY MANAGEMENT GROUP. LLC

By: Greg May

Name: GREG MAY

Title: Chief Operating Officer

Date: 10-15-07

CERTIFICATE OF COUNSEL

The undersigned, as counsel for the AUTHORITY in this transaction, hereby certifies that (s)he has examined the circumstances surrounding the selection of UMG and the award and letting of the foregoing contract to UMG by AUTHORITY, and has found that said selection and award process comply with the procurement laws of the State of Kentucky and AUTHORITY.

_____ Date: _____

Counsel for AUTHORITY

UTILITY MANAGEMENT GROUP, LLC

Utility Management Group, LLC (UMG) is a privately owned company established in 2004 whose stated purpose is to provide operations and management services to public utilities located in the Appalachian region of Kentucky, West Virginia, and Virginia. UMG presently has 130 employees and provides water, sewer, and other public services to over 21,000 homes and businesses in its market area.

The Chief Operating Officer of UMG is Greg May. Mr. May has over 15 years of utility management experience. He is directly responsible for all UMG operations. A Project Manager is designated to oversee each contracted utility operation, and corporate administrative staff handle accounting, finance, personnel, payroll, and legal matters.

At present, UMG has three specific contracts in place:

Mountain Water District: UMG entered into an operations and management contract with Mountain Water District in July, 2005. Mountain Water District has 17,600 water customers, 2,000+ sewer customers, a water treatment plant, three wastewater treatment plants, 840 miles of water mains, and 107 storage tanks. UMG manages all plant and field operations, customer billings and collections, and customer services. It is responsible for meeting all federal and state compliance requirements for the District.

City of Pikeville, Kentucky: UMG entered into a long term contract with the City of Pikeville in July 2007. Pursuant to that contract, UMG is responsible for the operation of virtually all of the City's public works: water treatment plant and distribution system, wastewater treatment plant and collection system, solid waste collections, gas distribution system, street and sidewalk maintenance, as well as parks and landscaping management.

Troublesome Creek Environmental Authority: Mr. May has been actively involved with the initial organization, development, and funding of the Troublesome Creek Environmental Authority. At this time, TCEA has secured funding for its first wastewater treatment plant and collection system and has procured the services of UMG to manage the system, once it is operational.

In addition to specific contract operations, UMG also provides a range of other services in the utility sector. They include a state of the art sewer camera system for inspection of buried lines, sewage pumping services, and leak detection services. UMG also assists its clients with developing, designing, and securing funding for system expansions and improvements.

***UTILITY MANAGEMENT GROUP, LLC** can be contacted at:*

Utility Management Group, LLC
158 Town Mountain Road, Suite 101
Pikeville, Kentucky 41501
Office: 606.437.4754
Fax: 606.437.5083

Ronald M. Johnson, P.E.
President/Owner

R.M. Johnson Engineering, Inc. was founded in 1986; In his capacity as a President/Owner of R.M. Johnson Engineering, Inc., Mr. Johnson is responsible for the technical oversight and administration of all the engineering projects utilizing a staff of seventeen (17). He also maintains close contact with clients to make certain they are kept abreast of the progress of their project. He also coordinates review and permit acquisitions with all required regulatory agencies, i.e. EPA, DSMRE, KYDOW, KYDOT, USACE, USFW, KDFWR, CSX, etc.

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Production and Environmental Engineering For; James River Coal Company, CONSOL of Kentucky Inc., Horizon Natural Resources, B & W Resources.

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Knott County Water & Sewer District Carr Creek Lake Water Treatment Plant and Intake Structure for a 2.0 MGD plant, design and construction.

Irishman Creek AML Water Expansion Project, 22 miles of 12" diameter ductile iron and 8" PVC/PE waterline expansion, design and construction.

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EDUCATION
University of Kentucky
Major: Mining/Civil Engineering

REGISTRATION
Professional Engineer
(Kentucky No. 14238)

Engineer-In-Training
(Kentucky No. 7530)

Land Surveyor-In-Training
(Kentucky No. 798)

City of Hindman:

City of Hindman Water Improvement and Expansion Projects, booster pump station and 5 miles of 8" PVC/PE waterline, 250K gallon water storage tank, design and construction

City of Hindman, 250K gallon water storage tank and related appurtenances, design and construction.

City of Hindman, Branch Line Extension Project, 5 miles of 6" PVC/PE waterline, design and construction.

City of Hindman, Hindman, Kentucky. 201 Regional Facilities Plan, SSES Project, I & I Elimination Project, Lift Station (9) Rehab Project, ForceMain and Gravity Collection Project Expansion.

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Class IIA Water Treatment
Operator No. [illegible]

Class IIA Water Distribution
Operator No. [illegible]

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McCoy Elkhorn Coal Corporation ACE 404 Stream Mitigation Project, Lick Branch in Pike County. Utilizing wetlands as off site in-kind mitigation.

M & T Logging Stream Mitigation Project, Clay County, Kentucky. Utilize on site in-kind stream restoration structures for mitigation.

Knott County Fiscal Court Stream Mitigation Project, Hindman, Kentucky. Utilizing on site in-kind stream restoration structures.

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REGISTRATION
Professional Engineer
(Kentucky No. 14238)

Engineer-in-Training
(Kentucky No. 7580)

Stephen R. Harris, P.E., L.S.I.T.

LEED Accredited Professional

Mr. Harris joined R.M. Johnson Engineering, Inc. in May 2007 as a Project Engineer and is now a key component of the Civil Engineering Department. He has served as the project engineer for numerous projects with an emphasis on infrastructure, site, and transportation projects. He has gained invaluable experience with utility relocation projects throughout central and eastern Kentucky. Mr. Harris has served as the design engineer on the following projects:

WATER RESOURCES PROJECTS

City of Hindman KY Route 160 Waterline Relocation. Hindman, KY. (Design In Progress). This project consists of the relocation of roughly 1.0 mile of existing waterline located along Route 160 near Knott County Central High School. This project is a portion of the Route 160 Roadway Relocation Project currently being design by the Kentucky Transportation Cabinet. Estimated Project Cost: $100,000.

Carr Creek Waterline Extension Project, Phase I. Carr Creek, KY (Design In Progress). This project includes the extension of waterline supply lines coming from the newly constructed Carr Creek Water Plant. The project consists of the installation of roughly 15 miles of 16", 12", and 8" ductile and PVC waterlines, a new 600,000 gallon water storage tank, and several pump stations and other appurtenances. This project will interconnect and supply water to the Letcher County Water & Sewer District's customers in the Letcher County area. Estimated Project Cost: $6,000,000.

Jamestown & Highway 80 Waterline Project; Jamestown, KY (Design Completed 2008). This project includes the installation of roughly 10 miles of 8" ductile and PVC waterlines throughout the western region of Knott County along Highway 80. The success of the project required the construction of a new 150,000 gallon tank and the relocation of several appurtenances throughout the system. Total Project Cost: $1,500,000.

ALC Tank Replacement & Pippa Passes Tank Rehabilitation Project; Pippa Passes, KY (Design Completed 2007). This

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(Spring 2006)
KY Core Surveying Curriculum

University of Kentucky
B.S. of Civil Engineering 2004

Alice Lloyd College (1999-2001)
Pre-Engineering Curriculum

REGISTRATION

project included the demolition and replacement of a 100,000 gallon steel tank and the rehabilitation of a 100,000 gallons glass-lined tank. Both of these tanks feed the entire water supply system for the City of Pippa Passes and Alice Lloyd College. Total Project Cost: $500,000.

Irishman Creek Waterline Project, Phase III; Carr Creek, KY (Construction Completed 2008). This project includes the design of approximately 6 miles of a 12" water main which will be the first connection to the anticipated Carr Creek Water Treatment Plant. This main will serve as the supply line for approximately 80 customers and a multitude of future branch line connections. Estimated Project Cost: $1,900,000.

Clear Creek Waterline Expansion – Phase I; Hindman, KY (Construction Completed 2008). Design for approximately 5 miles of 8" PVC and pump station to interconnect Troublesome Creek and Lotts Creek existing lines. Responsibilities for this project includes hydraulic design, DOW Submittal, and KYDOH encroachment permit. Estimated project cost will be around 1.2 million dollars.

Hall & Puncheon Waterline Extension Project; Topmost & Kite, KY (Construction Completed 2008). This project includes the design of approximately 4 miles of mostly 6" PVC branch lines which will serve approximately 100 customers total. Estimated Project Cost: $ 600,000.

Elk Glen Waterline Extension Project; Hindman, KY (Construction Completed 2007). This project included the design of an 8" waterline and booster pump station that would serve the residential development, Elk Glen and The Meadow, located along Route 80 in Knott County. Total Project Cost: $ 280,000.

Ball Creek Waterline Project; Knott County, KY (Construction Completed 2008). This project includes the construction of approximately 30 miles of mostly 8" water main that will serve about 600 customers throughout the Ball Creek area of Knott County. This project included the design of several booster pump stations along with the installation of several pressure reducing valves to accommodate the mountainous terrain of eastern Kentucky. Total Project Cost: $1,800,000.

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SEWAGE TREATMENT & COLLECTION PROJECTS

Ball Creek WWTP & Sewer Collection Project, Phase I; Vest, KY (Design In Progress). This project includes the design and construction of a 0.10 MGD WWTP and the installation of approximately 5.0 miles of 2" and 4" force main. The WWTP will be a Sequential Batch Reactor and will be a first in the region. The project will provide public sewer services to approximately 85 potential customers and the Chestnut Ridge Development which is the home of the Knott County Sportsplex. Estimate Project Cost: $3,500,000.

TRANSPORTATION PROJECTS

Route 699 Roadway Relocation Project; Leatherwood, KY (Design Completed 2007—In Construction). This project is a unique project where a private mining company has partnered with the Kentucky Department of Transportation to relocate approximately 1.0 miles of rural roadway in Perry County. The completed project will transform the existing narrow roadway into a 55 mph highway with two 12' lanes and adequate shoulders. Nearly 2.0 million cubic yards of earth will be moved to construct the roadway in its final location. This project also included the hydraulic design of roadway ditches and culverts.

Route 267 Roadway Relocation Project; Rowdy Gap, KY (Design In Progress). This project includes the relocation of approximately 1,600 linear feet of an existing narrow roadway located in Perry County. This finished product will yield a new 55 mph roadway with 12' lanes and adequate shoulders. The construction of this project will include moving approximately 850,000 cubic yards of earth to bring the site to finished ground. This project also included the hydraulic design of roadway drainage ditches.

Ramey Park Pedestrian Bridge Project; Salyersville, KY (Design Completed 2007). This project includes the emergency replacement of a pedestrian bridge located at Ramey Memorial Park in Salyersville. The existing swinging bridge was condemned by the Magoffin County Fiscal Court under a motion stating the bridge was unsafe to the public. The proposed bridge

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[illegible]

is a bow truss bridge with two 115' spans. The finished project will provide much more clear flow for the Licking River and provide the citizens of Salyersville with an appealing new bridge structure. Total Project Cost: $ 330,000. ***

Jane Arnett Branch Bridge Project; Salyersville, KY
(Design Completed 2006—Construction Completed 2006). This project includes the site design and layout for a 50' single span bridge which spans the Licking River. The bridge will replace an existing ford that is heavily used by Magoffin County Officials to access gas wells. ***

Thompson Road Widening Project—Phase 1; Pikeville, KY
(In Progress: 2005-Current). This project includes the reconstruction and widening of approximately one mile of a local roadway, as well as improving drainage and existing intersections along the alignment. Successful construction of the roadway will include mass utility relocations, and the construction of several retaining walls. The finished project will furnish the City of Pikeville with a corridor that enhances capacity, sight distance, and flow conditions. Total Project Cost: $ 4,410,000. ***

Access Road to Knott County Sportsplex; Hindman, KY
(Design Completed 2006--Construction Completed 2006). The project includes the design of approximately 1.0 mile of roadway, site/storm drainage, and an 8" waterline extension. The anticipated pavement section varies and includes a four-lane, three-lane, and a two-lane road, all with 12' lanes and curb and gutter. The objectives of the project are to provide access to the Knott County Fiscal Court's site located just off Route 80. This site is to be the seat of the highly anticipated Knott County Sports/Athletic Complex. Total Project Cost: $1,820,000. ***

SITE/CIVIL DESIGN PROJECTS

River of Earth Amphitheater Project; Hindman, KY
(In Construction). This project includes the demolition of a asphalt parking lot, the demolition of an existing stairwell, earthwork, utility relocations, and an existing bridge rehabilitation. When finished, this project will create a 90+ seat amphitheater to be used by the residents and visitors of Knott County. Total Project Cost: $250,000.

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Perry County Public Library Project; Hazard, KY (Design In Progress). This project involves the development of 2.5 acres in Perry County. The new home of the Perry County Public Library will sit along Black Gold Boulevard located in an existing commercial development park. The project includes the design and layout of parking lots, sanitary sewers, storm sewers, water and gas lines, and electric. Estimate Construction Cost: $6,000,000.

Knott County Recycling Center; Hindman, KY (In Progress). This project consists of the design and development of a 0.5 acre site that will be the home of the Knott County Recycling Center. Site design includes earthwork, storm sewer design, and providing service utilities to the proposed 5,000 square foot building. A concrete ramp and loading dock will be provided to aid the loading of compacted recyclables into a hauling truck. Estimated Construction Cost: $115,000.

Writt Station Subdivision Project; Lexington, KY (Design Completed 2006—In Construction) This project consisted of the design and development of a 10+ acre subdivision dedicated to single family residents. This project required the design for roadways, sanitary sewers, storm sewers, as well as a detention pond. The site contains 46 lots located within ¼ mile from Bryan Station High School. All aspects of design abide by Lexington-Fayette Urban County Government's (L.F.U.C.G's) specifications and regulations. Total Project Cost: $ 752,000. ***

Magoffin County Administration Building; Salyersville, KY (Design Completed 2006—In Construction). This project involved the site layout and design of a 15,300 square foot municipal building located in downtown Salyersville, adjacent to the Justice Center. The development of the site included the relocation of utilities, as well as, the construction of a 290 L.F. 4' X 12' single-box culvert, which lies directly underneath the parking lot. Estimated Construction Cost: $550,000. ***

Knott County Pool & Skateboard Park; Hindman, KY (Design Completed 2006—Construction Completed 2006). The project included the site layout and design of an unfinished project located in Hindman, Kentucky. The site design included the parking lot layout, storm sewers, and a concrete pad for the skateboard ramps. ***

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Alice Lloyd College (1999-2001)
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REGISTRATION

Harley Davidson of Lexington; Lexington, KY
(Design Completed 2005—Construction Complete in 2005). The project included a Development Plan which was approved by the LFUCG Planning Commission. The 3.33 acre commercial lot required site layout, drainage, and utility design. Final plans were in accordance with LFUCG's design specifications. Upon completion of the project, the final product will be a 35,500 square foot Harley Davidson of Lexington. Construction of this project is currently underway. ***

Homewood Suites - Hilton; Lexington, KY
(Design Completed 2005—Construction Complete in 2006). The project included the creation of a Development Plan which was approved by the LFUCG Planning Commission. The site development for the four-story hotel included site drainage, layout, and utility design, as well as, the relocation of approximately 300 feet of an 8" sanitary sewer line. Final plans were in accordance with the LFUCG's design specifications. When the project is completed, the 76,000 square foot hotel, Homewood Suites – Hilton, will provide 91 suites for the City of Lexington. ***

PETSuites – The Pet Resort; Lexington, KY
(Design Completed 2005—Construction Complete in 2006). Project included a Development Plan which was approved by the LFUCG Planning Commission. The 1.50 acre commercial development required site layout, drainage, and utility design. Upon completion of the project, PETSuites – The Pet Resort will provide citizens with the ability to leave their pets in the safe care of PETSuites. Final plans were in accordance with LFUCG's design specifications. ***

<u>FEASIBILITY STUDIES & PRO-FORMAS</u>

Redfox AML Study; Redfox, KY (In Progress). This study includes the sampling of water from the water supplies of the residents of Redfox to determine if Pre-Law Mining activities damaged the region's water supply. Approximately 85 interviews and samples were taken throughout the area. The final report will be submitted to AML for review and will possibly stimulate federal funding for public waterline projects in the area.

Handshoe Hotel Development; Hindman, KY (Performed 2007)
This is a Specialty Engineering Report that will include a pro-forma and preliminary site layout for the development of a 2-story

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hotel located just off of Route 80 in Knott County. This report will present to the owner the economic criteria for a successful investment.

Bice Property Development; Morehead, KY (Performed 2007)
This was a Specialty Engineering Report that included a pro-forma for a 90-acre potential subdivision development. The report contained a preliminary subdivision and infrastructure design with an economic analysis to determine the feasibility of the concept. ***

Western Pocahontas Feasibility Report; Hindman, KY (Performed 2006). This was a Specialty Engineering Report that included a pro-forma for the 300+ acre site located off of Route 80 in Knott County, Kentucky. A preliminary subdivision and infrastructure layout was created to determine if the project could be profitable. ***

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EDUCATION

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(2008-Present)
M.B.A. in Project Management

Kentucky Technical and
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(Spring 2000)
KY Core Surveying Curriculum

University of Kentucky
B.S. of Civil Engineering 2002

Alice Lloyd College (1998-2000)
Pre-Engineering Curriculum
Cabin Cottage Scholar

CONTINUING EDUCATION & RELATED SEMINARS

Residential Green Retrofitting Seminar – 05/09. (Provided by HalfMoon, LLC).

OMNIFLO SBR Wastewater Treatment Training Seminar – 03/09. Plant Tour in Kansas City, Kansas. (Provided by Siemens Water Technologies.)

Kentucky Glass Lined Tank Systems, Inc 2008 Field Day – 05/08 Plant Tour in Chicago, IL. (Provided by Kentucky Glass Lined Tank Systems, Inc.)

KYPIPE Seminar – 06/07 (Provided by the University of Kentucky & the KYPIPE Developers)

Masters of Business Administration – 08/06 to Present (Morehead State University)

KYTC HiDUG Meeting – 11/06 (Provided by Kentucky Transportation Cabinet)

Land Surveyor-In-Training – 10/06 (Kentucky Board of Engineers and Land Surveyors)

Detention Pond Design Seminar – 6/06 (Provided by Quest Engineers, Inc. per Kentucky Engineering Center)

Precast Concrete Products for Civil Engineering Applications – 3/06 (Seminar Provided by Sherman Dixie)

Brown's Boundary Law & Surveying – 1/06 to 5/06 (Kentucky Community of Technical College System)

Surveying Software – 1/06 to 5/06 (Kentucky Community of Technical College System)

MicroStation V8 Software – 8/05 (KYDOT and Kentucky Engineering Center)

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Marketing 101 Web Seminar – 6/05 (Hosted by American Society of Civil Engineers, ASCE)

Erosion & Sediment Control Workshop -- 3/05 (Hosted by Water Works Supplies & North American Green)

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Carry Captain Scholarship

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City of Wayland, Wayland Kentucky, Sanitary Sewer Collection and Plant Construction, Inspection services, EDA, PRIDE, CDBG and ARC Funds.

McCoy Elkhorn Coal Corporation ACE 404 Stream Mitigation Project, Lick Branch in Pike County. Utilizing wetlands as off site in-kind mitigation.

M & T Logging Stream Mitigation Project, Clay County, Kentucky. Utilize on site in-kind stream restoration structures for mitigation.

Knott County Fiscal Court Stream Mitigation Project, Hindman, Kentucky. Utilizing on site in-kind stream restoration structures.

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EDUCATION
University of Kentucky
Major: Mining/Civil Engineering

REGISTRATION
Professional Engineer
(Kentucky No. 14238)

Engineer In Training
(Kentucky No. 7530)

Stephen R. Harris, P.E., L.S.I.T.
LEED Accredited Professional

Mr. Harris joined R.M. Johnson Engineering, Inc. in May 2007 as a Project Engineer and is now a key component of the Civil Engineering Department. He has served as the project engineer for numerous projects with an emphasis on infrastructure, site, and transportation projects. He has gained invaluable experience with utility relocation projects throughout central and eastern Kentucky. Mr. Harris has served as the design engineer on the following projects:

WATER RESOURCES PROJECTS

City of Hindman KY Route 160 Waterline Relocation. Hindman, KY. (Design In Progress). This project consists of the relocation of roughly 1.0 mile of existing waterline located along Route 160 near Knott County Central High School. This project is a portion of the Route 160 Roadway Relocation Project currently being design by the Kentucky Transportation Cabinet. Estimated Project Cost: $100,000.

Carr Creek Waterline Extension Project, Phase I. Carr Creek, KY (Design In Progress). This project includes the extension of waterline supply lines coming from the newly constructed Carr Creek Water Plant. The project consists of the installation of roughly 15 miles of 16", 12", and 8" ductile and PVC waterlines, a new 600,000 gallon water storage tank, and several pump stations and other appurtenances. This project will interconnect and supply water to the Letcher County Water & Sewer District's customers in the Letcher County area. Estimated Project Cost: $6,000,000.

Jamestown & Highway 80 Waterline Project; Jamestown, KY (Design Completed 2008). This project includes the installation of roughly 10 miles of 8" ductile and PVC waterlines throughout the western region of Knott County along Highway 80. The success of the project required the construction of a new 150,000 gallon tank and the relocation of several appurtenances throughout the system. Total Project Cost: $1,500,000.

ALC Tank Replacement & Pippa Passes Tank Rehabilitation Project; Pippa Passes, KY (Design Completed 2007). This

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EDUCATION

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M.B.A. in Project Management

Kentucky Technical and Community College
(Spring 2006)
KY Core Surveying Curriculum

University of Kentucky
B.S. of Civil Engineering 2004

Alice Lloyd College (1999-2001)
Pre-Engineering Curriculum
Carey Cottage Scholar

REGISTRATION

project included the demolition and replacement of a 100,000 gallon steel tank and the rehabilitation of a 100,000 gallons glass-lined tank. Both of these tanks feed the entire water supply system for the City of Pippa Passes and Alice Lloyd College. Total Project Cost: $500,000.

Irishman Creek Waterline Project, Phase III; Carr Creek, KY (Construction Completed 2008). This project includes the design of approximately 6 miles of a 12" water main which will be the first connection to the anticipated Carr Creek Water Treatment Plant. This main will serve as the supply line for approximately 80 customers and a multitude of future branch line connections. Estimated Project Cost: $1,900,000.

Clear Creek Waterline Expansion – Phase I; Hindman, KY (Construction Completed 2008). Design for approximately 5 miles of 8" PVC and pump station to interconnect Troublesome Creek and Lotts Creek existing lines. Responsibilities for this project includes hydraulic design, DOW Submittal, and KYDOH encroachment permit. Estimated project cost will be around 1.2 million dollars.

Hall & Puncheon Waterline Extension Project; Topmost & Kite, KY (Construction Completed 2008). This project includes the design of approximately 4 miles of mostly 6" PVC branch lines which will serve approximately 100 customers total. Estimated Project Cost: $ 600,000.

Elk Glen Waterline Extension Project; Hindman, KY (Construction Completed 2007). This project included the design of an 8" waterline and booster pump station that would serve the residential development, Elk Glen and The Meadow, located along Route 80 in Knott County. Total Project Cost: $ 280,000.

Ball Creek Waterline Project; Knott County, KY (Construction Completed 2008). This project includes the construction of approximately 30 miles of mostly 8" water main that will serve about 600 customers throughout the Ball Creek area of Knott County. This project included the design of several booster pump stations along with the installation of several pressure reducing valves to accommodate the mountainous terrain of eastern Kentucky. Total Project Cost: $1,800,000.

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KY Core Surveying Curriculum

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B.S. in Civil Engineering, 2004

REGISTRATION

SEWAGE TREATMENT & COLLECTION PROJECTS

Ball Creek WWTP & Sewer Collection Project, Phase I; Vest, KY (Design In Progress). This project includes the design and construction of a 0.10 MGD WWTP and the installation of approximately 5.0 miles of 2" and 4" force main. The WWTP will be a Sequential Batch Reactor and will be a first in the region. The project will provide public sewer services to approximately 85 potential customers and the Chestnut Ridge Development which is the home of the Knott County Sportsplex. Estimate Project Cost: $3,500,000.

TRANSPORTATION PROJECTS

Route 699 Roadway Relocation Project; Leatherwood, KY (Design Completed 2007—In Construction). This project is a unique project where a private mining company has partnered with the Kentucky Department of Transportation to relocate approximately 1.0 miles of rural roadway in Perry County. The completed project will transform the existing narrow roadway into a 55 mph highway with two 12' lanes and adequate shoulders. Nearly 2.0 million cubic yards of earth will be moved to construct the roadway in its final location. This project also included the hydraulic design of roadway ditches and culverts.

Route 267 Roadway Relocation Project; Rowdy Gap, KY (Design In Progress). This project includes the relocation of approximately 1,600 linear feet of an existing narrow roadway located in Perry County. This finished product will yield a new 55 mph roadway with 12' lanes and adequate shoulders. The construction of this project will include moving approximately 850,000 cubic yards of earth to bring the site to finished ground. This project also included the hydraulic design of roadway drainage ditches.

Ramey Park Pedestrian Bridge Project; Salyersville, KY (Design Completed 2007). This project includes the emergency replacement of a pedestrian bridge located at Ramey Memorial Park in Salyersville. The existing swinging bridge was condemned by the Magoffin County Fiscal Court under a motion stating the bridge was unsafe to the public. The proposed bridge

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(Spring 2006)
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University of Kentucky
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Alice Lloyd College (1998-2001)
Pre-Engineering Curriculum
Berea College (Fall 1997)

is a bow truss bridge with two 115' spans. The finished project will provide much more clear flow for the Licking River and provide the citizens of Salyersville with an appealing new bridge structure. Total Project Cost: $ 330,000. ***

Jane Arnett Branch Bridge Project; Salyersville, KY
(Design Completed 2006—Construction Completed 2006). This project includes the site design and layout for a 50' single span bridge which spans the Licking River. The bridge will replace an existing ford that is heavily used by Magoffin County Officials to access gas wells. ***

Thompson Road Widening Project—Phase 1; Pikeville, KY
(In Progress: 2005-Current). This project includes the reconstruction and widening of approximately one mile of a local roadway, as well as improving drainage and existing intersections along the alignment. Successful construction of the roadway will include mass utility relocations, and the construction of several retaining walls. The finished project will furnish the City of Pikeville with a corridor that enhances capacity, sight distance, and flow conditions. Total Project Cost: $ 4,410,000. ***

Access Road to Knott County Sportsplex; Hindman, KY
(Design Completed 2006--Construction Completed 2006). The project includes the design of approximately 1.0 mile of roadway, site/storm drainage, and an 8" waterline extension. The anticipated pavement section varies and includes a four-lane, three-lane, and a two-lane road, all with 12' lanes and curb and gutter. The objectives of the project are to provide access to the Knott County Fiscal Court's site located just off Route 80. This site is to be the seat of the highly anticipated Knott County Sports/Athletic Complex. Total Project Cost: $1,820,000. ***

SITE/CIVIL DESIGN PROJECTS

River of Earth Amphitheater Project; Hindman, KY
(In Construction). This project includes the demolition of a asphalt parking lot, the demolition of an existing stairwell, earthwork, utility relocations, and an existing bridge rehabilitation. When finished, this project will create a 90+ seat amphitheater to be used by the residents and visitors of Knott County. Total Project Cost: $250,000.

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KY Core Surveying Curriculum

University of Kentucky
B.S. of Civil Engineering 2004

Alice Lloyd College (1999-2004)
Pre-Engineering Curriculum
Caney Cottage Scholar

REGISTRATION

Perry County Public Library Project; Hazard, KY
(Design In Progress). This project involves the development of 2.5 acres in Perry County. The new home of the Perry County Public Library will sit along Black Gold Boulevard located in an existing commercial development park. The project includes the design and layout of parking lots, sanitary sewers, storm sewers, water and gas lines, and electric. Estimate Construction Cost: $6,000,000.

Knott County Recycling Center; Hindman, KY (In Progress). This project consists of the design and development of a 0.5 acre site that will be the home of the Knott County Recycling Center. Site design includes earthwork, storm sewer design, and providing service utilities to the proposed 5,000 square foot building. A concrete ramp and loading dock will be provided to aid the loading of compacted recyclables into a hauling truck. Estimated Construction Cost: $115,000.

Writt Station Subdivision Project; Lexington, KY
(Design Completed 2006—In Construction) This project consisted of the design and development of a 10+ acre subdivision dedicated to single family residents. This project required the design for roadways, sanitary sewers, storm sewers, as well as a detention pond. The site contains 46 lots located within ¼ mile from Bryan Station High School. All aspects of design abide by Lexington-Fayette Urban County Government's (L.F.U.C.G's) specifications and regulations. Total Project Cost: $ 752,000. ***

Magoffin County Administration Building; Salyersville, KY
(Design Completed 2006—In Construction). This project involved the site layout and design of a 15,300 square foot municipal building located in downtown Salyersville, adjacent to the Justice Center. The development of the site included the relocation of utilities, as well as, the construction of a 290 L.F. 4' X 12' single-box culvert, which lies directly underneath the parking lot. Estimated Construction Cost: $550,000. ***

Knott County Pool & Skateboard Park; Hindman, KY
(Design Completed 2006—Construction Completed 2006). The project included the site layout and design of an unfinished project located in Hindman, Kentucky. The site design included the parking lot layout, storm sewers, and a concrete pad for the skateboard ramps. ***

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University of Kentucky
B.S. of Civil Engineering (2000)

Alice Lloyd College (1998-2000)
Pre-Engineering Curriculum

Caney College (2000)

Harley Davidson of Lexington; Lexington, KY
(Design Completed 2005—Construction Complete in 2005). The project included a Development Plan which was approved by the LFUCG Planning Commission. The 3.33 acre commercial lot required site layout, drainage, and utility design. Final plans were in accordance with LFUCG's design specifications. Upon completion of the project, the final product will be a 35,500 square foot Harley Davidson of Lexington. Construction of this project is currently underway. ***

Homewood Suites - Hilton; Lexington, KY
(Design Completed 2005—Construction Complete in 2006). The project included the creation of a Development Plan which was approved by the LFUCG Planning Commission. The site development for the four-story hotel included site drainage, layout, and utility design, as well as, the relocation of approximately 300 feet of an 8" sanitary sewer line. Final plans were in accordance with the LFUCG's design specifications. When the project is completed, the 76,000 square foot hotel, Homewood Suites – Hilton, will provide 91 suites for the City of Lexington. ***

PETSuites – The Pet Resort; Lexington, KY
(Design Completed 2005—Construction Complete in 2006). Project included a Development Plan which was approved by the LFUCG Planning Commission. The 1.50 acre commercial development required site layout, drainage, and utility design. Upon completion of the project, PETSuites – The Pet Resort will provide citizens with the ability to leave their pets in the safe care of PETSuites. Final plans were in accordance with LFUCG's design specifications. ***

FEASIBILITY STUDIES & PRO-FORMAS

Redfox AML Study; Redfox, KY (In Progress). This study includes the sampling of water from the water supplies of the residents of Redfox to determine if Pre-Law Mining activities damaged the region's water supply. Approximately 85 interviews and samples were taken throughout the area. The final report will be submitted to AML for review and will possibly stimulate federal funding for public waterline projects in the area.

Handshoe Hotel Development; Hindman, KY (Performed 2007)
This is a Specialty Engineering Report that will include a pro-forma and preliminary site layout for the development of a 2-story

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(Spring 2006)
KY Core Surveying Curriculum

University of Kentucky
B.S. of Civil Engineering, 2004

Alice Lloyd College (July 2001)
Pre-Engineering Curriculum
Appalachian Scholar

REGISTRATION
Registered Professional

hotel located just off of Route 80 in Knott County. This report will present to the owner the economic criteria for a successful investment.

Bice Property Development; Morehead, KY (Performed 2007) This was a Specialty Engineering Report that included a pro-forma for a 90-acre potential subdivision development. The report contained a preliminary subdivision and infrastructure design with an economic analysis to determine the feasibility of the concept. ***

Western Pocahontas Feasibility Report; Hindman, KY (Performed 2006). This was a Specialty Engineering Report that included a pro-forma for the 300+ acre site located off of Route 80 in Knott County, Kentucky. A preliminary subdivision and infrastructure layout was created to determine if the project could be profitable. ***

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KY Core Surveying Curriculum

University of Kentucky
B.S. of Civil Engineering 2004

Alice Lloyd College (1999-2001)
Pre-Engineering Curriculum
Caney Cottage Scholar

REGISTRATION

Professional Engineer

CONTINUING EDUCATION & RELATED SEMINARS

Residential Green Retrofitting Seminar – 05/09. (Provided by HalfMoon, LLC).

OMNIFLO SBR Wastewater Treatment Training Seminar -- 03/09. Plant Tour in Kansas City, Kansas. (Provided by Siemens Water Technologies.)

Kentucky Glass Lined Tank Systems, Inc 2008 Field Day – 05/08 Plant Tour in Chicago, IL. (Provided by Kentucky Glass Lined Tank Systems, Inc.)

KYPIPE Seminar – 06/07 (Provided by the University of Kentucky & the KYPIPE Developers)

Masters of Business Administration – 08/06 to Present (Morehead State University)

KYTC HiDUG Meeting – 11/06 (Provided by Kentucky Transportation Cabinet)

Land Surveyor-In-Training – 10/06 (Kentucky Board of Engineers and Land Surveyors)

Detention Pond Design Seminar -- 6/06 (Provided by Quest Engineers, Inc. per Kentucky Engineering Center)

Precast Concrete Products for Civil Engineering Applications – 3/06 (Seminar Provided by Sherman Dixie)

Brown's Boundary Law & Surveying – 1/06 to 5/06 (Kentucky Community of Technical College System)

Surveying Software – 1/06 to 5/06 (Kentucky Community of Technical College System)

MicroStation V8 Software – 8/05 (KYDOT and Kentucky Engineering Center)

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(Spring 2006)
KY Core Surveying Curriculum

University of Kentucky
B.S. in Civil Engineering 2003

Marketing 101 Web Seminar – 6/05 (Hosted by American Society of Civil Engineers, ASCE)

Erosion & Sediment Control Workshop – 3/05 (Hosted by Water Works Supplies & North American Green)

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University of Kentucky
B.S. of Civil Engineering 2001

Alice Lloyd College (1999-2001)
Pre-Engineering Curriculum
Spring College (Detroit)

REGISTRATION

Jennifer McIntosh

From: Ron Johnson [rjohnson@rmje.net]

Sent: Monday, December 07, 2009 9:40 AM

To: dgibson@intlcoal.com; jconley@wpplp.com; jimchilders@consolenergy.com; Jennifer McIntosh; gregmay@umgllc.net; crtackett@setel.com; roger@kaco.org; co.judge@knottcountyky.com; Bob Meyer

Subject: Ball Cr WWTP Schedule

All,

Pursuant to the last meeting I was asked to supply a timeline for the bid phase of the project:

- Advertise bid for 2 contracts (WWTP and Collection) in Lex Herald Leader 12/18/09
- Close bid 01/06/10, open at 1:00 PM and read aloud at KRADD office
- Bid Tabulations
- TEA board meeting 01/12/10; if project's in budget RMJE will issue a Letter of Recommendation of Award to board for their consideration
- If board approves a Notice of Award signed by Chairman Warrix will be sent to winning contractor (s)
- The next week on Wed or Thurs (provided the contractor(s) will have obtained bonds) we will conduct a Pre-Construction Meeting and execute contracts (Chairman Warrix will need to attend and execute)
- At the end of the pre-construction, issue a 10 day Notice to Proceed; contract begins in 10 days and we break ground prior to 02/10 to satisfy stimulus grant/loan requirement

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TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY
CUSTOMER SERVICE REQUEST

No:_____

Taken By: _____ Date:_____ Time:_____

Received VIA: Telephone___ Letter___ Other:_____

Taken From: Name:_____ Customer No. _____

Address:_____

Telephone No: ( ) _____

EXPLANATION:_____

_____

_____

_____

LOCATION:_____

_____

FIELD NOTES: (DATE)

MATERIAL	EQUIPMENT	LABOR
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

WORK TO BE PERFORMED _____

_____

_____

COST TO CUSTOMER

REGULAR TAP FEE _____
EXTRA LINE _____
MATERIALS _____
LABOR _____
OTHER _____

SPECIAL ISTRUCTIONS_____

_____

_____

DECISION: _____ BY: _____

WORK ORDER NUMBER _____ DATE ISSUED _____

Troublesome Creek Environmental Authority

Sewer User Agreement
For Pressure Sewer System

Phone No: _____

This agreement entered into between_____

whose address is_____

_____

hereinafter called "user," and the Troublesome Creek Environmental Authority called the "Authority."

WITNESSETH

WHEREAS, the user desires to use the sewer services of the Authority, and to enter into a sewer users agreement as required by the Bylaws of the Authority.

NOW THEREFORE, in consideration of the mutual covenants, promises, and agreements herein contained, it is hereby understood and agreed by the parties hereto as follows:

The Authority shall furnish, subject to the limitations set out in its Bylaws and Rules and Regulations now in force or as hereafter amended, a sewer system in connection with user's occupancy of the following described property:

_____

_____

The user agrees to grant to the Authority, its successors and assigns, a perpetual easement in, over, through, under, and upon the above described land, with the right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove sewer lines and appurtenant facilities, together with the right to utilize adjoining lands belonging to the user for the purpose of ingress to and egress from the above described lands.

The user hereby agrees to connect to the sewer system of the Authority. The tap-on fee of the sewer system is $ _____. A State inspection fee payable to the Kentucky State Treasurer of $ _____ will be charged (residential) at the time of connection (all businesses must obtain permits at the Knott County Health Department).

The user agrees to comply with and be bound by the Bylaws and Rules and Regulations of the Authority, now in force, or as hereafter duly and legally supplemented, amended or changed. The user also agrees to pay sewer charges at such rates, time and place as shall be determined by the Authority, and agrees to the imposition of such penalties for noncompliance as are now set out in the Authority's Bylaws and Rules and Regulations, or which may be hereafter adopted and imposed by the Authority. The monthly rates will be reasonable and the user shall comply with all rates, rules and regulations of the Authority, which are approved by the Public Service Commission of Kentucky.

The Authority shall have final authority on any questions of location of any service line connection to its sewer system, and may shut off water service to a user who allows a connection or extension to be made to such sewer lines for the purpose of supplying sewer service to another user.

The user recognizes that a grinder pump is being installed and accordingly must be aware that foreign objects, which cannot be ground, must not be disposed to the sewer. The Authority is responsible for the installation and routine maintenance of the grinder pump; however, if after inspection of a problem, it is found that improper items were in the sewer, the user shall be billed for necessary repairs.

User also agrees that the electric service for the grinder pump shall be supplied by the user and will allow the Authority to connect to their service when the pump is installed.

The user shall install and maintain, at user's expense, service connection lines to the grinder pump on user's property and all other devices necessary to deposit user's sewage into Authority's sewer. Service line material and installation must be in accordance with the State Plumbing Code as administered by the Division of Plumbing, Department of Housing, Building and Construction. All and any work on the customer's side shall be inspected by an appropriate representative of the Knott County Health Department before the service line is backfilled. The user shall keep the service line and appurtenances in good working condition at all times and keep any infiltration from entering the service line. The user shall not deposit sewage in such a manner that as to cause unusual fluctuations or disturbances to the Authority's system. The Authority will use reasonable diligence in supplying sewer service, but shall not be liable for breach of contract in the event of injury, damage to persons or property, or for loss resulting from interruptions in service. The service connection supplied by the Authority for the user has a definite capacity, and no addition to the equipment or load connected thereto will be allowed except by consent of the Authority. Failure to give notice of additions or changes in load and to obtain the Authority's consent for same, shall render the user liable for any damage to the Authority's lines or equipment caused by the additional change or installation.

The user shall connect sewer service lines to the Authority's Collection System and shall commence to use sewer services of the system on the date the sewer collection

line is made available to the user by the Authority. Sewer user charges to the user shall commence on the date service is made available, regardless of whether the user connects to the system.

It is mutually understood and agreed that the failure to pay sewer service charges duly imposed shall result in the automatic imposition of the following penalties:

1. Non-payment by the due date will be subject to a penalty of (5%) percent of the delinquent amount.
2. Non-payment within thirty days from the due date will result in the water being shut off from the user's property.
3. In the event it becomes necessary for the Authority to shut off the water from the user's property, a fee of $25.00 will be charged for reconnection of the service. The user will also be required to pay all delinquent accounts in full, unless otherwise agreed to in writing.

If the sewer system is constructed, and the user's property covered by the Agreement is not reached by the Authority's sewer line, the connection fee will be fully refunded to the user. Construction of sewer lines to serve the property covered under this Agreement depends upon feasibility, availability of funds for construction, and approval of all local, state, and federal agencies having jurisdiction over this type of facility.

THE AUTHORITY DOES NOT GUARANTEE SEWER SERVICE TO THE USER.

IN WITNESS WHEREOF, we have executed this agreement this the _____day of _____, 20___.

USER _____

BY _____

(For Troublesome Creek Environmental Authority)

Troublesome Creek Environmental Authority
User Agreement
For Gravity Sewer System

Customer Phone Number:_____

This agreement entered into between_____,
Whose address is _____

_____
hereinafter called "user", and the Troublesome Creek Environmental Authority, 917 Perry Park Road, Hazard KY 41701, hereinafter called the "TEA".

WITNESS

WHEREAS, the user desires to use the sewer services of the TEA, and to enter into a sewer user's agreement as required by the TEA.

NOW THEREFORE, in consideration of the mutual covenants, promises, and agreements herein contained, it is hereby understood and agreed by the parties hereto as follows:

The TEA shall furnish, subject to the limitations set out in its Rules and Regulations now in force or as hereafter amended, a sewer system in connection with user's occupancy of the following described property:

_____

_____

The user agrees to grant to TEA, its successors and assigns, a perpetual easement in, over, through, under, and upon the above described land, with the right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove sewer lines and appurtenant facilities, together with the right to utilize adjoining lands belonging to the user for the purpose of ingress and egress from the above described lands.

The user hereby agrees to connect to the sewer system of TEA. The tap-on fee of the sewer system is $_____. A State inspection fee payable to the Kentucky State Treasurer of $_____ will be charged (residential) at the time of connection (all businesses must obtain permits at the appropriate County Health Department).

The user agrees to comply with and be bound by the Rules and Regulations of TEA, now in force, or as hereafter duly and legally supplemented, amended or changed. The user also agrees to pay sewer charges at such rates, time and place as shall be

determined by TEA, and agrees to the imposition of such penalties for non-compliance as are now set out in TEA's Rules and Regulations, or which may be hereafter adopted and imposed by TEA. The monthly rates will be reasonable and the user shall comply with all rates, rules and regulations of TEA, which are approved by the Public Service Commission of Kentucky.

TEA shall have final authority on any questions of location of any service line connection to its sewer system, and may disconnect water service to a user who allows a connection or extension to be made to such sewer lines for the purpose of supplying sewer service to another user.

The user shall install and maintain, at user's expense, service lines on user's property and all other devices necessary to deposit user's sewage into TEA's sewer. Service line material and installation must be in accordance with the State Plumbing Code as administered by the Division of Plumbing, Department of Housing, Building and Construction. Any and all work on the Customers' side shall be inspected by an appropriate representative of the appropriate Health Department before the service line is backfilled. The user shall keep the service line and appurtenances in good working condition at all times and keep any infiltration from entering the service line. The user shall not deposit sewage in such manner as to cause unusual fluctuations of disturbances to TEA's system. TEA will use reasonable diligence in supplying sewer service, but shall not be liable for breach of contract in the event of injury, damage to persons or property, or for loss resulting from interruptions in service. The service connection supplied by TEA for the user has a definite capacity, and no addition to the equipment or load connected thereto will be allowed except by consent of TEA. Failure to give notice of additions or changes in load and to obtain TEA's consent for same, shall render the user liable for any damage to TEA's lines or equipment caused by the additional or changed installation.

The user shall connect sewer service lines to TEA's Collection System and shall commence to use sewer services of the system on the date the sewer collection line is made available to the user by TEA. Sewer user charges to the user shall commence on the date service is made available, regardless of whether the user connects to the system.

It is mutually understood and agreed that the failure to pay sewer service charges duly imposed shall result in the automatic imposition of the following penalties:

1. Non-payment within ten days from the due date will be subject to penalty of ten (10%) percent of the delinquent amount.

2. Non-payment within thirty days from the due date will result in the service being disconnected from the user's property.

3. In the event it becomes necessary for the TEA to disconnect the water from a user's property, a fee of $25.00 will be charged for reconnection of the service ($35.00 if reconnection is made after

normal business hours). The user will also be required to pay all delinquent accounts in full, unless otherwise agreed to in writing.

If this Agreement relates to proposed construction of a new sewer service area, and the sewer system is constructed, and the user's property covered by the Agreement is not reached by the TEA's sewer line, the connection fee will be fully refunded to the user. Construction of sewer lines to serve the property covered under this Agreement depends upon feasibility, availability of funds for Construction, and approval of all local, state, and federal agencies having jurisdiction over this type of facility.

TEA DOES NOT GUARANTEE SEWER SERVICE TO THE USER.

IN WITNESS WHEROF, we have executed this agreement this the _____day of _____,200_____.

USER_____

BY:_____
(Troublesome Creek Environmental Authority)

SEWER USER AGREEMENT
FOR ALTERNATIVE SEWER SYSTEM

User Phone No: _____

This agreement entered into between _____,

whose address is _____

_____

hereinafter called "user" and Troublesome Creek Environmental Authority hereinafter called "TEA).

W I T N E S S E T H

WHEREAS, the user desires to have TEA install and the user to utilize an alternative sewer system approved by TEA, and to enter into a sewer user's agreement as required by the Policies of TEA;

NOW THEREFORE, in consideration of the mutual covenants, promises and agreements herein contained, it is hereby understood and agreed by the parties hereto as follows:

TEA shall maintain an alternative sewer system that has been approved by the appropriate County Health Department and TEA, subject to the limitations set out in TEA's Rules and Regulations and Tariffs now in force or as hereafter amended, a sewer system in connection with user's occupancy of the following described property:

_____

_____

The user agrees to grant to TEA, it successors and assigns, a perpetual easement in, over, through, under, and upon the above described land, with right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove sewer lines and appurtenant facilities, together with the right to utilize adjoining lands belonging to the user for the purpose of ingress to and egress from the above described lands.

The user hereby agrees to utilize an alternative sewer system (fusion, aerator, conventional septic tank or other) approved by TEA. The connection fee for the sewer system is $ _____. A state inspection fee (for all residential sewer services) payable to the Kentucky State Treasurer in the amount of $_____ will be paid directly by the user at the time of connection. All new commercial or business sewer users must obtain permits at the appropriate County Health Department, at their own expense, prior to the installation of the system. The ALTERNATIVE SEWER SYSTEM WILL BECOME PROPERTY OF TEA.

The user agrees to comply with and be bound by the Rules and Regulations and Tariffs of TEA, now in force, or as hereafter duly and legally supplemented, amended or changed. The user also agrees to pay sewer charges at such rates, time and place as shall be determined by TEA, and agrees to the imposition of such penalties for noncompliance as are now set out in TEA's Rules and Regulations and Tariffs, or which may be hereafter adopted and imposed by TEA. The monthly rates will be reasonable and the user shall comply with all rates, rules and regulations of TEA that are approved by the Public Service Commission of Kentucky.

TEA shall have final decision making authority related to the location of the alternative sewer system, and may shut off water service to any user who allows a connection or extension to be made to TEA's sewer line or appurtenances for the purpose of supplying sewer service to another user.

The user recognizes that an alternative sewer system is being installed and, accordingly agrees that they will not permit any foreign objects or concentrated chemicals to be introduced into the sewer system. TEA is responsible for the installation and routine maintenance of the alternative system; however, if after inspection of a problem, it is found that improper items were put into the sewer system by the user, the user shall be billed for necessary repairs.

User also agrees that the installation of electric service and routine monthly charges from any power company associated with any electrical component of the sewer system shall be supplied by and paid for by the user. The user will allow TEA to connect the electrical components of its alternative sewer system to the user's electric service facilities when the system is installed.

The user shall install and maintain, at user's expense, service connection lines to the alternative system on user's property and all other devices necessary to deposit user's waste stream into TEA's alternative system. Service line material and installation must be in accordance with the State Plumbing Code as administered by the Division of Plumbing, Department of Housing, Building and Construction. Any and all work on the customer's side shall be inspected by an appropriate representative of the appropriate County Health Department before the service line is backfilled. The user shall keep the service line and appurtenances in good working condition at all times and keep any surface water infiltration from entering TEA's sewer system. The user shall not deposit sewage in such a manner as to cause unusual fluctuations or disturbances in TEA's system. TEA will use reasonable diligence in supplying sewer service, but shall not be liable for breach of contract in the event of injury, damage to persons or property, or for loss resulting from interruptions in service. The service connection supplied by TEA to the user has a limited and specific capacity, and no addition to the equipment or load connection thereto will be allowed except with specific consent of TEA. Failure to give notice of additions or changes in load and to obtain TEA's consent for same, shall render the user liable for any damage to TEA's lines or equipment caused by the additional or changed installation.

The user shall connect sewer service lines to TEA's Alternative System and shall commence to use sewer services of the system on the date the sewer system is made available to the user by TEA. Sewer user charges to the user shall commence on the date service is made available, regardless of whether or not the user connects to the system.

It is mutually understood and agreed that the failure to pay sewer service charges pursuant to this agreement shall result in the automatic imposition of the following penalties:

1. Non-payment by the due date will be subject to a penalty of five (5%) percent of the delinquent amount.

2. Non-payment within thirty days from the due date will result in the user's service being disconnected by TEA.

3. In the event it becomes necessary for TEA to shut off the service from a user's property, a fee of $25.00 will be charged for reconnection of the service. The user will also be required to pay all delinquent accounts in full, unless otherwise agreed to in writing, prior to service being restored.

IN WITNESS WHEREOF, we have executed this agreement on the _____day of _____, 20____.

_____ _____

USER (Printed Name) USER Signature

By:_____ _____

Troublesome Creek Environmental Authority Title of Authorized Signatory

Troublesome Creek Environmental Authority

Sewer User Agreement
For Pressure Sewer System

Phone No: _____

This agreement entered into between_____

whose address is_____

_____

hereinafter called "user," and the Troublesome Creek Environmental Authority called the "Authority."

WITNESSETH

WHEREAS, the user desires to use the sewer services of the Authority, and to enter into a sewer users agreement as required by the Bylaws of the Authority.

NOW THEREFORE, in consideration of the mutual covenants, promises, and agreements herein contained, it is hereby understood and agreed by the parties hereto as follows:

The Authority shall furnish, subject to the limitations set out in its Bylaws and Rules and Regulations now in force or as hereafter amended, a sewer system in connection with user's occupancy of the following described property:

_____

_____

The user agrees to grant to the Authority, its successors and assigns, a perpetual easement in, over, through, under, and upon the above described land, with the right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove sewer lines and appurtenant facilities, together with the right to utilize adjoining lands belonging to the user for the purpose of ingress to and egress from the above described lands.

The user hereby agrees to connect to the sewer system of the Authority. The tap-on fee of the sewer system is $ _____. A State inspection fee payable to the Kentucky State Treasurer of $ _____ will be charged (residential) at the time of connection (all businesses must obtain permits at the Knott County Health Department).

The user agrees to comply with and be bound by the Bylaws and Rules and Regulations of the Authority, now in force, or as hereafter duly and legally supplemented, amended or changed. The user also agrees to pay sewer charges at such rates, time and place as shall be determined by the Authority, and agrees to the imposition of such penalties for noncompliance as are now set out in the Authority's Bylaws and Rules and Regulations, or which may be hereafter adopted and imposed by the Authority. The monthly rates will be reasonable and the user shall comply with all rates, rules and regulations of the Authority, which are approved by the Public Service Commission of Kentucky.

The Authority shall have final authority on any questions of location of any service line connection to its sewer system, and may shut off water service to a user who allows a connection or extension to be made to such sewer lines for the purpose of supplying sewer service to another user.

The user recognizes that a grinder pump is being installed and accordingly must be aware that foreign objects, which cannot be ground, must not be disposed to the sewer. The Authority is responsible for the installation and routine maintenance of the grinder pump; however, if after inspection of a problem, it is found that improper items were in the sewer, the user shall be billed for necessary repairs.

User also agrees that the electric service for the grinder pump shall be supplied by the user and will allow the Authority to connect to their service when the pump is installed.

The user shall install and maintain, at user's expense, service connection lines to the grinder pump on user's property and all other devices necessary to deposit user's sewage into Authority's sewer. Service line material and installation must be in accordance with the State Plumbing Code as administered by the Division of Plumbing, Department of Housing, Building and Construction. All and any work on the customer's side shall be inspected by an appropriate representative of the Knott County Health Department before the service line is backfilled. The user shall keep the service line and appurtenances in good working condition at all times and keep any infiltration from entering the service line. The user shall not deposit sewage in such a manner that as to cause unusual fluctuations or disturbances to the Authority's system. The Authority will use reasonable diligence in supplying sewer service, but shall not be liable for breach of contract in the event of injury, damage to persons or property, or for loss resulting from interruptions in service. The service connection supplied by the Authority for the user has a definite capacity, and no addition to the equipment or load connected thereto will be allowed except by consent of the Authority. Failure to give notice of additions or changes in load and to obtain the Authority's consent for same, shall render the user liable for any damage to the Authority's lines or equipment caused by the additional change or installation.

The user shall connect sewer service lines to the Authority's Collection System and shall commence to use sewer services of the system on the date the sewer collection

line is made available to the user by the Authority. Sewer user charges to the user shall commence on the date service is made available, regardless of whether the user connects to the system.

It is mutually understood and agreed that the failure to pay sewer service charges duly imposed shall result in the automatic imposition of the following penalties:

1. Non-payment by the due date will be subject to a penalty of (5%) percent of the delinquent amount.
2. Non-payment within thirty days from the due date will result in the water being shut off from the user's property.
3. In the event it becomes necessary for the Authority to shut off the water from the user's property, a fee of $25.00 will be charged for reconnection of the service. The user will also be required to pay all delinquent accounts in full, unless otherwise agreed to in writing.

If the sewer system is constructed, and the user's property covered by the Agreement is not reached by the Authority's sewer line, the connection fee will be fully refunded to the user. Construction of sewer lines to serve the property covered under this Agreement depends upon feasibility, availability of funds for construction, and approval of all local, state, and federal agencies having jurisdiction over this type of facility.

THE AUTHORITY DOES NOT GUARANTEE SEWER SERVICE TO THE USER.

IN WITNESS WHEREOF, we have executed this agreement this the _____day of _____, 20___.

USER _____

BY _____

(For Troublesome Creek Environmental Authority)

HBC 31-05 (815 KAR 20:050)
(Rev. 4/21/05)

Environmental and Public Protection Cabinet
Office of Housing, Buildings and Construction
Division of Plumbing
101 Sea Hero Road, Suite 100
Frankfort, Kentucky 40601-5405

Affidavit of Homeowner

Name: _____ Telephone: _____

Address: _____ Permit No: _____

I, the undersigned, after being duly sworn, state that I will install the plumbing in my house at the address shown personally by myself and this home shall be for my personal use.

I will submit to the plumbing inspector a set of blueprints with a riser diagram showing the size of all pipes, soil, waste, vent and water pipes before a permit is obtained. I am aware that this must be constructed as a licensed plumber would install. I agree that I will be on the job when the inspector is there for all inspections. I realize that no set time can be given for inspections. I will call and request the inspections the day that the plumbing inspector is in the county where the home is being constructed between the hours of 8:00 A.M. and 9:00 A.M., unless it is a county where the inspector is there between 1:00 P.M. and 2:00 P.M. Final inspections must be made before occupying the premises. I agree that I am not entitled to obtain a homeowner's permit for a new home for a period of five years.

☐ I will install this water service at the above mentioned address with my own hands and this home shall be for my personal use.

☐ I will install this sewer service at the above mentioned address with my own hands and this home shall be for my personal use.

☐ I will install this water heater at the above mentioned address with my own hands and this home shall be for my personal use.

I am fully aware that I must install this water service, sewer service or water heater in the same manner as it would be constructed by persons licensed by the Office of Housing, Buildings and Construction and I shall notify the plumbing inspector at the appropriate time for inspections and tests. I also understand that inspections must be made prior to the time any part of the work is concealed.

I further understand that any plumbing work that I may do or have done in the future, whether it be new or additional plumbing or replacing old plumbing, must be inspected by the county plumbing inspector and I hereby agree to contact the inspector myself for I understand that as a property owner I am responsible under the law to see that this is done. I further state that I am capable of completing this installation in accordance with the codes.

It has been explained to me by the local plumbing inspector that using unlicensed individuals to install plumbing on my behalf may result in criminal prosecution pursuant to KRS Chapter 318, with a possible penalty of up to $100 and ninety (90) days in jail.

_____
Affiant's Signature Date

Commonwealth of Kentucky
County of _____

Subscribed and sworn to before me by _____ (Affiant), on this the _____ day of _____, 200 ____ .

My Commission Expires: _____.

File Copy - White
Owner's Copy - Canary

Kentucky UNBRIDLED SPIRIT™

_____
Notary Public

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY

ANALYSIS OF PROPOSED SEWER RATES (See Note Below)
BALL CREEK SEWER PROJECT

	TOTALS		1st 2,000 Gallons	3,000 to 10,000 Gallons	10,000 and above (Gallons)
NUMBER OF CUSTOMERS					
RESIDENTIAL					
Minimum use cust.(2,000 Gal)					
Assume 40%	53		53	0	
Cust > 2,000 Gal	80		80	80	
Total Resid Cust	133		133	80	0
COMMERCIAL	5		5	5	5
TOTAL CUSTOMERS	138		138	85	5
PROJECTED GALLONS USAGE/MONTH					
Minimum usage cust. (assume 40%)	106,400		106,400		
Cust > 2,000 Gal	425,600		159,600	266,000	
Total Resid Cust	532,000		266,000	266,000	0
Commercial Customers	324,000		10,000	40,000	274,000
TOTAL CUSTOMERS	856,000		276,000	306,000	274,000
PROPOSED RATES:			**$19.00**	**$8.00**	**$6.00**
PROJECTED REVENUE:					
MONTHLY	$9,336		$5,244	$2,448	$1,644
ANNUALLY	$112,032		$62,928	$29,376	$19,728

PROPOSED RATE SUMMARY:

MINIMUM BILL (2,000 Gallons)	$19.00
NEXT 8,000 Gallons (per 1,000)	$8.00
OVER 10,000 Gallons (per 1,000)	$6.00
AVERAGE RESIDENTIAL MONTHLY BILL (For 4,000 Gallons Usage)	$35.00

NOTE: These proposed rates are based on assumptions outlined in a separate operations budget for the Ball Creek Sewer Project and additional assumptions identified above. Should there be any significant changes in those assumptions, the proposed rate structure may have to be modified accordingly. Further, the proposed rates are subject to review and approval by the Public Service Commission and formal adoption by the Troublesome Creek Environmental Authority once the PSC review process has been completed. Proposed rates are anticipated to go into effect in February 2011.

FOR Entire Service Area
Community

P.S.C. KY. NO. _____

ORIGINAL SHEET NO. _____

Troublesome Creek Environmental Authority
(Name of Utility)

CANCELLING P.S.C. KY. NO. _____

SHEET NO. _____

RULES AND REGULATIONS

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY

Rates, Rules and Regulations for Furnishing

Wastewater Service

In

Headwaters of Troublesome Creek - Ball Fork Area

Knott County, Kentucky

Filed with the PUBLIC SERVICE COMMISSION OF KENTUCKY

January, 2010

RULES AND REGULATIONS

Wastewater Rates

Monthly Rates

First 2,000 Gallons	$19.00 Minimum Bill
Over 2,000 Gallons to 10,000 Gallons	$ 8.00 Per 1,000 Gallons
Over 10,000 Gallons	$ 6.00 Per 1,000 Gallons

Connection Fee

Gravity Wastewater

Standard Residential Gravity Wastewater Connection	$750.00
Other Than Standard Residential Gravity Wastewater Connection	AT COST

Pressure Wastewater

Standard Residential Pressure Wastewater Connection	$2,600.00
Other Than Standard Residential Pressure Wastewater Connection	AT COST

Any customer applying for a new wastewater connection may pay the connection fee on an installment plan. The installment plan may be for a length of up to 24 months at 0% interest; however, the connection will not be installed until the installment plan is paid in full.

All additional size connections – Actual Cost

Monthly Usage Charge for Special Service

Multi-Unit Facility

The monthly charge for customers who have wastewater service at a multi-unit facility shall be the amount based on the average gallons of water usage per housing unit at the current wastewater rate schedule times the number of housing units in the multiple facility. Should water service not be available at the facility, the monthly charge shall be the amount based on the water system average at the current wastewater rate schedule times the number of housing units in the multiple facility.

Monthly Charge for Special Service

Wastewater Customer Without Metered Water Service

Wastewater customers without metered water service shall be billed an amount equal to the state-wide average of 4,500 gallons per month per customer for usage at the current wastewater rate schedule.

RULES AND REGULATIONS

This schedule of Rules and Regulations governs the furnishing of wastewater service by the Troublesome Creek Environmental Authority, hereinafter referred to as TEA, and applies to all services rendered from TEA. No employee or individual Director of TEA is permitted to make any exception to Rates, Rules or Regulations. All Rules and Regulations are to be in effect so long as they are not in conflict with Public Service Commission Rules and Regulations. TEA is further subject to all Rules and Regulations of the Public Service Commission even though not contained herein.

REVISIONS

These Rules and Regulations may be revised, amended, supplemented or otherwise changed from time to time subject to approval of the Public Service Commission, and shall have the same force as the present Rules and Regulations.

SERVICE AREA

Initially, TEA will furnish wastewater service to residents in designated portions of the head waters of Troublesome Creek in Knott County, including but not exclusively the Ball Creek area and environs.

AVAILABILITY

Wastewater service is available to any domestic consumer within TEA's designated initial service area. Those wastewater treatment plants not owned by TEA but lying within its initial service area shall not be the responsibility of TEA unless agreed upon by both parties.

MAINTENANCE

TEA may at any time deemed necessary, suspend wastewater service to any consumer or consumers for the purpose of making repairs, changes or improvements upon any part of its system. TEA shall give reasonable notice of such suspension of service to consumers.

TEA shall be responsible for the maintenance of that portion of the service lateral installed by TEA and the consumer shall be responsible for the maintenance of that portion thereof installed by the consumer on gravity systems. On pressure systems the customer shall be responsible for that portion of wastewater lateral beyond the grinder station.

BILLING, COLLECTION, PENALTIES

Bills and notices relating to the conduct of the business of TEA will be mailed to the customer at the address listed on the user's agreement unless change of address has been filed in writing with TEA, and

RULES AND REGULATIONS

TEA shall not otherwise be responsible for delivery of any bill or notice nor will the customer be excused from the payment of any bill or any performance required in said notice.

Bills for wastewater service are due and payable at the offices of TEA, or to any designated agent, on the date of issue. The past due date shall be the 20th day after the date of issue. On all accounts not paid in full by the next billing date, an additional charge of 10 percent of the unpaid portion will be made. Payments may be made in the form of cash or check.

All bills not paid on or before the past due date shall be deemed delinquent. Any said delinquent bill will appear as added to next month's balance.

SUBSTANCES NOT TO BE DISCHARGED INTO WASTEWATER SYSTEM

No substances shall be placed or discharged into the sanitary wastewater system which will create a combustible, gaseous, explosive or flammable condition in such wastewater system nor shall any substances or objects be placed or discharged into the wastewater system which will not dissolve and which will thus create an obstruction and clogging within the system. No petroleum products shall be placed or discharged into the wastewater system.

No swimming pool, storm water or surface drain shall be connected with the wastewater system nor shall any pool, storm or surface water be otherwise introduced into the wastewater system.

WASTEWATER SYSTEM FAILURE

TEA is responsible for wastewater failure only when such failure is in control of TEA employees or agents. No consumer is paid damages for equipment unless such damages are specifically found to be caused by an act of negligence on the part of TEA or its agents or employees.

PROTECTION BY CONSUMER

Consumer shall protect the equipment of TEA on his/her premises and shall not interfere with TEA property or permit interference except by duly authorized representatives of TEA.

NOTICE OF TROUBLE

Consumer shall give immediate notice to TEA of any irregularities or unsatisfactory service and of any defects known to consumer.

When a customer or applicant refuses or neglects to provide reasonable access to the premises for the purpose of installation, operation, maintenance or removal of TEA property, TEA may discontinue or

refuse service only after the customer or applicant shall have been given at least fifteen (15) days written notice of such intention.

TEA shall not be required to furnish service to any applicant when such applicant is indebted to TEA for service furnished until such applicant shall have paid such indebtedness.

TEA may refuse or discontinue service to a customer or applicant if the customer or applicant does not comply with state, municipal or other codes, rules and regulations applying to such service.

1. For Nonpayment of Bills

   TEA shall not discontinue service to any customer for nonpayment of bills (including delayed charges) without first having made a reasonable effort to induce the customer to pay same.

   The customer shall be given at least five (5) days written notice, but the cut-off shall not be affected before twenty (20) days after the mailing date of the original bill. Such termination notice shall be exclusive of and separate from any bill. The termination notice shall include notification to the customer in writing of the existence of local, state and federal programs providing for the payment of TEA bills under certain conditions and of the offices to contact for such possible assistance. If prior to discontinuance of service, there is delivered to the TEA office payment of the amount in arrears, then discontinuance of service shall not be made, or where a written certificate is filed signed by a physician, a registered nurse or a public health officer stating, that in the opinion of the person making the certification discontinuance of service will aggravate an existing illness or infirmity on the affected premises, service shall not be discontinued until the affected resident can make other living arrangements or until thirty (30) days elapse from the time of TEA' notification.

2. For Fraudulent or Illegal Use of Service

   When TEA has discovered evidence that, by fraudulent or illegal means a customer has obtained unauthorized service or has diverted the service for unauthorized use or has obtained service without same being properly measured, the service to the customer may be discontinued without notice. TEA shall not be required to restore service until the customer has complied with all rules and regulations of TEA and TEA has been reimbursed for the estimated amount of the service rendered and the cost to TEA incurred by reason of the fraudulent use.

TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY

PRO-FORMA INCOME STATEMENT / 1ST YEAR OF OPERATIONS

BALL CREEK SEWER PROJECT - PHASE I

		MONTHLY	YEARLY
REVENUE FROM OPERATIONS			
Residential Customers	(Total of 133 Resid. Customers)	$4,655	$55,860
Commercial Customers	(Total of 5 Commercial Customers)	$2,059	$24,708
Initial Operating Subsidy	*(Footnote A)*	$2,500	$30,000
TOTAL PROJECTED REVENUES		**$9,214**	**$110,568**
OPERATION & MAINTENANCE EXPENSES			
PERSONNEL			
SALARIES / WAGES		$2,513	$30,160
TAXES & BENEFITS		$1,010	$12,120
VEHICLE EXPENSES		$928	$11,136
LAB EXPENSES		$128	$1,536
CHEMICALS		$90	$1,080
ELECTRICITY		$2,346	$28,152
ROUTINE MAINTENANCE		500	6000
ADMINISTRATIVE	(Billing & Other Administrative Expenses)	$340	$4,080
CONTRACT OPERATIONS FEE		$668	$8,012
TOTAL CONTRACT OPERATIONS EXPENSE	(Footnote B)	$8,523	$102,276
OTHER ADMINISTRATIVE EXPENSES	(Paid by TCEA)		
O&M Reserve Payments		$150	$1,800
Liability Insurance Expense		$300	$3,600
TOTAL PROJECTED OPERATIONS EXPENSES:		**$8,973**	**$107,676**
PROJECTED REVENUES IN EXCESS OF EXPENSES		***$241***	***$2,892***

Form **990-EZ**

Department of the Treasury
Internal Revenue Service

Short Form
Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code
(except black lung benefit trust or private foundation)

▶ Sponsoring organizations of donor advised funds and controlling organizations as defined in section 512(b)(13) must file Form 990. All other organizations with gross receipts less than $1,000,000 and total assets less than $2,500,000 at the end of the year may use this form.

▶ The organization may have to use a copy of this return to satisfy state reporting requirements.

OMB No. 1545-1150

2008

Open to Public Inspection

A For the 2008 calendar year, or tax year beginning 07-01 , 2008, and ending 06-30 , 20 09

B Check if applicable:
- ☐ Address change
- ☐ Name change
- ☒ Initial return
- ☐ Termination
- ☐ Amended return
- ☐ Application pending

Please use IRS label or print or type. See Specific Instructions.

C Name of organization
TROUBLESOME CREEK ENVIRONMENTAL AUTHOR

Number and street (or P.O. box, if mail is not delivered to street address) | Room/suite
917 PERRY PARK RD

City or town, state or country, and ZIP + 4
Hazard, KY 41701

D Employer identification number
[redacted]

E Telephone number
(606) 436-3158

F Group Exemption Number ▶

● Section 501(c)(3) organizations and 4947(a)(1) nonexempt charitable trusts must attach a completed Schedule A (Form 990 or 990-EZ).

G Accounting method: ☒ Cash ☐ Accrual
Other (specify) ▶

I Website: ▶

H Check ▶ ☐ if the organization is not required to attach Schedule B (Form 990, 990-EZ, or 990-PF).

J Organization type (check only one) - ☒ 501(c) (3) ◀ (insert no.) ☐ 4947(a)(1) or ☐ 527

K Check ▶ ☐ if the organization is not a section 509(a)(3) supporting organization and its gross receipts are normally not more than $25,000. A return is not required, but if the organization chooses to file a return, be sure to file a complete return.

L Add lines 5b, 6b, and 7b, to line 9 to determine gross receipts; if $1,000,000 or more, file Form 990 instead of Form 990-EZ ▶$ 98,793

Part I Revenue, Expenses, and Changes in Net Assets or Fund Balances (See the instructions for Part I.)

Revenue	1	Contributions, gifts, grants, and similar amounts received	1	
	2	Program service revenue including government fees and contracts	2	
	3	Membership dues and assessments	3	
	4	Investment income	4	
	5a	Gross amount from sale of assets other than inventory — 5a		
	b	Less: cost or other basis and sales expenses — 5b		
	c	Gain or (loss) from sale of assets other than inventory (Subtract line 5b from line 5a) (attach schedule)	5c	
	6	Special events and activities (complete applicable parts of Schedule G). If any amount is from gaming, check here ▶ ☐		
	a	Gross revenue (not including $ _____ of contributions reported on line 1) — 6a		
	b	Less: direct expenses other than fundraising expenses — 6b		
	c	Net income or (loss) from special events and activities (Subtract line 6b from line 6a)	6c	
	7a	Gross sales of inventory, less returns and allowances — 7a		
	b	Less: cost of goods sold — 7b		
	c	Gross profit or (loss) from sales of inventory (Subtract line 7b from line 7a)	7c	
	8	Other revenue (describe ▶ STM141)	8	98,793
	9	**Total revenue.** Add lines 1, 2, 3, 4, 5c, 6c, 7c, and 8 ▶	9	98,793
Expenses	10	Grants and similar amounts paid (attach schedule)	10	
	11	Benefits paid to or for members	11	
	12	Salaries, other compensation, and employee benefits	12	
	13	Professional fees and other payments to independent contractors	13	82,186
	14	Occupancy, rent, utilities, and maintenance	14	
	15	Printing, publications, postage, and shipping	15	
	16	Other expenses (describe ▶ STM130)	16	1,518
	17	**Total expenses.** Add lines 10 through 16 ▶	17	83,704
Net Assets	18	Excess or (deficit) for the year (Subtract line 17 from line 9)	18	15,089
	19	Net assets or fund balances at beginning of year (from line 27, column (A)) (must agree with end-of-year figure reported on prior year's return)	19	39,473
	20	Other changes in net assets or fund balances (attach explanation)	20	
	21	Net assets or fund balances at end of year. Combine lines 18 through 20 ▶	21	54,562

Part II Balance Sheets. If Total assets on line 25, column (B) are $2,500,000 or more, file Form 990 instead of Form 990-EZ.

(See the instructions for Part II.)

		(A) Beginning of year		(B) End of year
22	Cash, savings, and investments	39,473	22	51,562
23	Land and buildings		23	3,000
24	Other assets (describe ▶)		24	
25	**Total assets**	39,473	25	54,562
26	**Total liabilities** (describe ▶)		26	
27	**Net assets or fund balances** (line 27 of column (B) must agree with line 21)	39,473	27	54,562

Part III Statement of Program Service Accomplishments (See the instructions for Part III.)

What is the organization's primary exempt purpose? PROVIDE ADEQUATE WASTEWATER TREATMENT

Describe what was achieved in carrying out the organization's exempt purposes. In a clear and concise manner, describe the services provided, the number of persons benefited, or other relevant information for each program title.

		Expenses (Required for 501(c)(3) and (4) organizations and 4947(a)(1) trusts; optional for others.)
28	ESTABLISHED A WASTEWATER TREATMENT FACILITY AND RELATED PUMPING STATIONS AND DISTRIBUTION LINES TO AN UNTREATED AREA OF SE KY. BEGAN DESIGN PROCESS IN CURRENT FISCAL YEAR (Grants $) If this amount includes foreign grants, check here ▶ ☐	28a 83,704
29	(Grants $) If this amount includes foreign grants, check here ▶ ☐	29a
30	(Grants $) If this amount includes foreign grants, check here ▶ ☐	30a
31	Other program services (attach schedule) (Grants $) If this amount includes foreign grants, check here ▶ ☐	31a
32	**Total program service expenses** (add lines 28a through 31a) ▶	32 83,704

Part IV List of Officers, Directors, Trustees, and Key Employees. List each one even if not compensated. (See the instructions for Part IV.)

(a) Name and address	(b) Title and average hours per week devoted to position	(c) Compensation (If not paid, enter -0-.)	(d) Contributions to employee benefit plans & deferred compensation	(e) Expense account and other allowances
LEWIS H WARRIX 525 PICNIC HILL RD Jackson KY, 41339	CHAIRMAN 1	0	0	0
TIM SPENCER 17 WAR CREEK ROAD Jackson KY, 41339	SECRETARY 1	0	0	0
JIM CHILDERS 390 HURRICANE BRANCH Leburn KY, 41831	BOARD MEMBER 1	0	0	0
CHARLES COLWELL 47 GUM AVENUE Hazard KY, 41701	BOARD MEMBER 1	0	0	0
DON GIBSON 3578 POSSUM TROT ROAD Leburn KY, 41831	BOARD MEMBER 1	0	0	0

Part V Other Information (Note the statement requirements in the instructions for Part VI.)

			Yes	No
33	Did the organization engage in any activity not previously reported to the IRS? If "Yes," attach a detailed description of each activity	33		X
34	Were any changes made to the organizing or governing documents but not reported to the IRS? If "Yes," attach a conformed copy of the changes	34		X
35	If the organization had income from business activities, such as those reported on lines 2, 6a, and 7a (among others), but not reported on Form 990-T, attach a statement explaining your reason for not reporting the income on Form 990-T.			
a	Did the organization have unrelated business gross income of $1,000 or more or section 6033(e) notice, reporting, and proxy tax requirements?	35a		X
b	If "Yes," has it filed a tax return on Form 990-T for this year?	35b		
36	Was there a liquidation, dissolution, termination, or substantial contraction during the year? If "Yes," complete applicable parts of Schedule N	36		X
37 a	Enter amount of political expenditures, direct or indirect, as described in the instructions ▶ 37a			
b	Did the organization file Form 1120-POL for this year?	37b		X
38 a	Did the organization borrow from, or make any loans to, any officer, director, trustee, or key employee or were any such loans made in a prior year and still unpaid at the start of the period covered by this return?	38a		X
b	If "Yes," complete Schedule L, Part II and enter the total amount involved 38b			
39	501(c)(7) organizations. Enter:			
a	Initiation fees and capital contributions included on line 9 39a			
b	Gross receipts, included on line 9, for public use of club facilities 39b			
40 a	Section 501(c)(3) organizations. Enter amount of tax imposed on the organization during the year under: section 4911 ▶ ; section 4912 ▶ ; section 4955 ▶			
b	Section 501(c)(3) and (4) organizations. Did the organization engage in any section 4958 excess benefit transaction during the year or did it become aware of an excess benefit transaction from a prior year? If "Yes," complete Schedule L, Part I	40b		X
c	Enter amount of tax imposed on organization managers or disqualified persons during the year under sections 4912, 4955, and 4958 ▶			
d	Enter amount of tax on line 40c reimbursed by the organization ▶			
e	All organizations. At any time during the tax year, was the organization a party to a prohibited tax shelter transaction? If "Yes," complete Form 8886-T	40e		X

41 List the states with which a copy of this return is filed. ▶ KY

42 a The books are in care of ▶ JENNIFER MCINTOSH Telephone no. ▶ 606-436-3158

Located at ▶ 917 PERRY PARK ROAD Hazard, KY ZIP + 4 ▶ 41701

			Yes	No
b	At any time during the calendar year, did the organization have an interest in or a signature or other authority over a financial account in a foreign country (such as a bank account, securities account, or other financial account)?	42b		X
	If "Yes," enter the name of the foreign country: ▶ See the instructions for exceptions and filing requirements for Form TD F 90-22.1, Report of Foreign Bank and Financial Accounts.			
c	At any time during the calendar year, did the organization maintain an office outside of the U.S.?	42c		X
	If "Yes," enter the name of the foreign country: ▶			

43 Section 4947(a)(1) nonexempt charitable trusts filing Form 990-EZ in lieu of Form 1041-Check here ▶ ☐

and enter the amount of tax-exempt interest received or accrued during the tax year ▶ 43

			Yes	No
44	Did the organization maintain any donor advised funds? If "Yes," Form 990 must be completed instead of Form 990-EZ	44		X
45	Is any related organization a controlled entity of the organization within the meaning of section 512(b)(13)? If "Yes," Form 990 must be completed instead of Form 990-EZ	45		X

Part VI **Section 501(c)(3) organizations only.** All section 501(c)(3) organizations must answer questions 46-49 and complete the tables for lines 50 and 51.

			Yes	No
46	Did the organization engage in direct or indirect political campaign activities on behalf of or in opposition to candidates for public office? If "Yes," complete Schedule C, Part I	46		X
47	Did the organization engage in lobbying activities? If "Yes," complete Schedule C, Part II	47		X
48	Is the organization operating a school as described in section 170(b)(1)(A)(ii)? If "Yes," complete Schedule E	48		X
49 a	Did the organization make any transfers to an exempt non-charitable related organization?	49a		X
b	If "Yes," was the related organization(s) a section 527 organization?	49b		

50 Complete this table for the five highest compensated employees (other than officers, directors, trustees and key employees) who each received more than $100,000 of compensation from the organization. If there is none, enter "None."

(a) Name and address of each employee paid more than $100,000	(b) Title and average hours per week devoted to position	(c) Compensation	(d) Contributions to employee benefit plans & deferred compensation	(e) Expense account and other allowances
NONE				
Total number of other employees paid over $100,000 ▶				

51 Complete this table for the five highest compensated independent contractors who each received more than $100,000 of compensation from the organization. If there are none, enter "None."

(a) Name and address of each independent contractor paid more than $100,000	(b) Type of service	(c) Compensation
NONE		
Total number of other independent contractors each receiving over $100,000 ▶		

Sign Here

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Signature of officer — Date: 11/16/09

LEWIS H WARRIX, CHAIRMAN

Type or print name and title.

Paid Preparer's Use Only

Preparer's signature	Date	Check if self-employed ▶ X	Preparer's Identifying No. (See inst.)
			[redacted]

Firm's name (or yours if self-employed), address, and ZIP + 4:
CHRIS GOOCH, CPA
P.O. BOX 1536
HAZARD, KY 41702

EIN ▶ [redacted]

Phone no. ▶ 606-436-5700

May the IRS discuss this return with the preparer shown above? See instructions ▶ X Yes ☐ No

SCHEDULE A
(Form 990 or 990-EZ)

Department of the Treasury
Internal Revenue Service

Public Charity Status and Public Support

To be completed by all section 501(c)(3) organizations and section 4947(a)(1) nonexempt charitable trusts.

▶ Attach to Form 990 or Form 990-EZ. ▶ See separate instructions.

OMB No. 1545-0047

2008

Open to Public Inspection

Name of the organization
TROUBLESOME CREEK ENVIRONMENTAL AUTHORITY, INC.

Employer identification number
[redacted]

Part I Reason for Public Charity Status (All organizations must complete this part.) (see instructions)

The organization is not a private foundation because it is: (Please check only one organization.)

1 ☐ A church, convention of churches, or association of churches described in section 170(b)(1)(A)(i).

2 ☐ A school described in section 170(b)(1)(A)(ii). (Attach Schedule E.)

3 ☐ A hospital or a cooperative hospital service organization described in section 170(b)(1)(A)(iii). (Attach Schedule H.)

4 ☐ A medical research organization operated in conjunction with a hospital described in section 170(b)(1)(A)(iii). Enter the hospital's name, city, and state:

5 ☐ An organization operated for the benefit of a college or university owned or operated by a governmental unit described in section 170(b)(1)(A)(iv). (Complete Part II.)

6 ☐ A federal, state, or local government or governmental unit described in section 170(b)(1)(A)(v).

7 ☒ An organization that normally receives a substantial part of its support from a governmental unit or from the general public described in section 170(b)(1)(A)(vi). (Complete Part II.)

8 ☐ A community trust described in section 170(b)(1)(A)(vi). (Complete Part II.)

9 ☐ An organization that normally receives: (1) more than 33 1/3% of its support from contributions, membership fees, and gross receipts from activities related to its exempt functions - subject to certain exceptions, and (2) no more than 33 1/3% of its support from gross investment income and unrelated business taxable income (less section 511 tax) from businesses acquired by the organization after June 30, 1975. See section 509(a)(2). (Complete Part III.)

10 ☐ An organization organized and operated exclusively to test for public safety. See section 509(a)(4). (see instructions)

11 ☐ An organization organized and operated exclusively for the benefit of, to perform the functions of, or to carry out the purposes of one or more publicly supported organizations described in section 509(a)(1) or section 509(a)(2). See section 509(a)(3). Check the box that describes the type of supporting organization and complete lines 11e through 11h.

a ☐ Type I b ☐ Type II c ☐ Type III-Functionally integrated d ☐ Type III-Other

e ☐ By checking this box, I certify that the organization is not controlled directly or indirectly by one or more disqualified persons other than foundation managers and other than one or more publicly supported organizations described in section 509(a)(1) or section 509(a)(2).

f If the organization received a written determination from the IRS that it is a Type I, Type II, or Type III supporting organization, check this box . . . . . ☐

g Since August 17, 2006, has the organization accepted any gift or contribution from any of the following persons?

		Yes	No
(i)	A person who directly or indirectly controls, either alone or together with persons described in (ii) and (iii) below, the governing body of the supported organization?	11g(i)	
(ii)	A family member of a person described in (i) above?	11g(ii)	
(iii)	A 35% controlled entity of a person described in (i) or (ii) above?	11g(iii)	

h Provide the following information about the organizations the organization supports.

(i) Name of supported organization	(ii) EIN	(iii) Type of organization (described on lines 1-9 above or IRC section (see instructions))	(iv) Is the organization in col. (i) listed in your governing document? Yes	(iv) No	(v) Did you notify the organization in col. (i) of your support? Yes	(v) No	(vi) Is the organization in col. (i) organized in the U.S.? Yes	(vi) No	(vii) Amount of support
Total									

Part II **Support Schedule for Organizations Described in Sections 170(b)(1)(A)(iv) and 170(b)(1)(A)(vi)**
(Complete only if you checked the box on line 5, 7, or 8 of Part I.)

Section A. Public Support

Calendar year (or fiscal year beginning in) ▶	(a) 2004	(b) 2005	(c) 2006	(d) 2007	(e) 2008	(f) Total
1 Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.")				75,000	98,793	173,793
2 Tax revenues levied for the organization's benefit and either paid to or expended on its behalf						
3 The value of services or facilities furnished by a governmental unit to the organization without charge						
4 **Total.** Add lines 1-3				75,000	98,793	173,793
5 The portion of total contributions by each person (other than a governmental unit or publicly supported organization) included on line 1 that exceeds 2% of the amount shown on line 11, column (f)						
6 **Public support.** Subtract line 5 from line 4						173,793

Section B. Total Support

Calendar year (or fiscal year beginning in) ▶	(a) 2004	(b) 2005	(c) 2006	(d) 2007	(e) 2008	(f) Total
7 Amounts from line 4				75,000	98,793	173,793
8 Gross income from interest, dividends, payments received on securities loans, rents, royalties and income from similar sources						
9 Net income from unrelated business activities, whether or not the business is regularly carried on						
10 Other income. Do not include gain or loss from the sale of capital assets (Explain in Part IV.)						
11 **Total support.** Add lines 7 through 10						173,793

12 Gross receipts from related activities, etc. (see instructions) 12

13 **First five years.** If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and **stop here** ▶ ☒

Section C. Computation of Public Support Percentage

14 Public support percentage for 2008 (line 6, column (f) divided by line 11, column (f)) 14 0.00 %

15 Public support percentage from 2007 Schedule A, Part IV-A, line 26f 15 %

16a **33 1/3% support test - 2008.** If the organization did not check the box on line 13, and line 14 is 33 1/3% or more, check this box and **stop here.** The organization qualifies as a publicly supported organization ▶ ☐

b **33 1/3% support test - 2007.** If the organization did not check a box on line 13 or 16a, and line 15 is 33 1/3% or more, check this box and **stop here.** The organization qualifies as a publicly supported organization ▶ ☐

17a **10%-facts-and-circumstances test - 2008.** If the organization did not check a box on line 13, 16a, or 16b, and line 14 is 10% or more, and if the organization meets the "facts-and-circumstances" test, check this box and **stop here.** Explain in Part IV how the organization meets the "facts-and-circumstances" test. The organization qualifies as a publicly supported organization ▶ ☐

b **10%-facts-and-circumstances test - 2007.** If the organization did not check a box on line 13, 16a, 16b, or 17a, and line 15 is 10% or more, and if the organization meets the "facts-and-circumstances" test, check this box and **stop here.** Explain in Part IV how the organization meets the "facts-and-circumstances" test. The organization qualifies as a publicly supported organization ▶ ☐

18 **Private foundation.** If the organization did not check a box on line 13, 16a, 16b, 17a, or 17b, check this box and see instructions ▶ ☐

Part III **Support Schedule for Organizations Described in Section 509(a)(2)**
(Complete only if you checked the box on line 9 of Part I.)

Section A. Public Support

Calendar year (or fiscal year beginning in) ▶	(a) 2004	(b) 2005	(c) 2006	(d) 2007	(e) 2008	(f) Total
1 Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.")						
2 Gross receipts from admissions, merchandise sold or services performed, or facilities furnished in any activity that is related to the organization's tax-exempt purpose						
3 Gross receipts from activities that are not an unrelated trade or business under section 513						
4 Tax revenues levied for the organization's benefit and either paid to or expended on its behalf						
5 The value of services or facilities furnished by a governmental unit to the organization without charge						
6 **Total.** Add lines 1-5						
7a Amounts included on lines 1, 2, and 3 received from disqualified persons						
b Amounts included on lines 2 and 3 received from other than disqualified persons that exceed the greater of 1% of the total of lines 9, 10c, 11, and 12 for the year or $5,000						
c Add lines 7a and 7b						
8 **Public support** (Subtract line 7c from line 6.)						

Section B. Total Support

Calendar year (or fiscal year beginning in) ▶	(a) 2004	(b) 2005	(c) 2006	(d) 2007	(e) 2008	(f) Total
9 Amounts from line 6						
10a Gross income from interest, dividends, payments received on securities loans, rents, royalties and income from similar sources						
b Unrelated business taxable income (less section 511 taxes) from businesses acquired after June 30, 1975						
c Add lines 10a and 10b						
11 Net income from unrelated business activities not included in line 10b, whether or not the business is regularly carried on						
12 Other income. Do not include gain or loss from the sale of capital assets (Explain in Part IV.)						
13 **Total support.** (Add lines 9, 10c, 11, and 12.)						

14 **First five years.** If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and stop here ▶ ☐

Section C. Computation of Public Support Percentage

15	Public support percentage for 2008 (line 8, column (f) divided by line 13, column (f))	15	%
16	Public support percentage from 2007 Schedule A, Part IV-A, line 27g	16	%

Section D. Computation of Investment Income Percentage

17	Investment income percentage for 2008 (line 10c, column (f) divided by line 13, column (f))	17	%
18	Investment income percentage from 2007 Schedule A, Part IV-A, line 27h	18	%

19a **33 1/3% support tests - 2008.** If the organization did not check the box on line 14, and line 15 is more than 33 1/3%, and line 17 is not more than 33 1/3%, check this box and stop here. The organization qualifies as a publicly supported organization ▶ ☐

b **33 1/3% support tests - 2007.** If the organization did not check a box on line 14 or line 19a, and line 16 is more than 33 1/3%, and line 18 is not more than 33 1/3%, check this box and stop here. The organization qualifies as a publicly supported organization ▶ ☐

20 **Private Foundation:** If the organization did not check a box on line 14, 19a, or 19b, check this box and see instructions ▶ ☐

	Federal Supporting Statements	2008
Name(s) as shown on return		FEIN

Form 990EZ, Part I, Line 16
Other Expenses Schedule 2

Description	Amount
BANK CHARGES	20
TAX AND LICENSE	1,102
ADVERTISING	396
Total	1,518

Form 990EZ, Part I, Line 8
Other Revenues Schedule 2

Description	Amount
INTERIM FINANCING - KENTUCKY RURAL WATER ASSOCIATION	0
	98,793
Total	98,793