

Goss ■ Samford PLLC

 Attorneys at Law

David S. Samford
david@gosssamfordlaw.com
(859) 368-7740

September 4, 2013

Via Hand-Delivery

Mr. Jeffrey Derouen
Executive Director
Kentucky Public Service Commission
P.O. Box 615
211 Sower Boulevard
Frankfort, KY 40602

RECEIVED

SEP 04 2013

PUBLIC SERVICE
COMMISSION

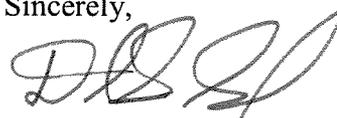
Re: In the Matter of the Application of Fern Lake Company for Rate Adjustment for Small Utilities Pursuant to 807 KAR 5:076; Case No.2013-00172

Dear Mr. Derouen:

Enclosed for filing in the above styled matter is the original and ten copies of a Notice of Filing for documents requested by PSC Staff in an August 30, 2013, email.

Please file these documents in the record and return a file-stamped copy to me. Feel free to contact me should you have any questions.

Sincerely,


David S. Samford

Enclosures

cc: Todd Osterloh (also via email)
Gregory Dutton (also via email)

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION FOR ALTERNATIVE RATE) CASE NO.
FILING OF FERN LAKE COMPANY) 2013-00172

NOTICE OF FILING

Comes now Fern Lake Company, by counsel, and gives notice of filing for the following documents filed pursuant to the email received from Commission Staff on August 30, 2013:

1. Copies of inspection reports for Fern Lake Dam, including the “Guidelines for Maintenance and Inspection of Dams in Kentucky” as published by the Kentucky Division of Water;
2. Copies of legal service invoices for this matter through July 31, 2013; and
3. Copies of the 2012 W2s for Shelly Lewis, Tommy Lewis and Joshua Lewis.

The total rate case expense for which Fern Lake Company seeks recovery is \$14,997.76. However, Fern Lake Company notes that additional legal services were rendered on its behalf during the month of August and that the invoice for such services for the month of August have not been received as of the time of this filing. There will continue to be legal services performed in this matter until it is completely resolved and Fern Lake Company reserves the right to supplement this filing as additional rate case expenses are incurred.

Respectfully submitted,



David S. Samford
L. Allyson Honaker
GOSS SAMFORD, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, Kentucky 40504
(859) 368-7740
David@gosssamfordlaw.com
Allyson@gosssamfordlaw.com
Counsel for Fern Lake Company

CERTIFICATE OF SERVICE

This will certify that a true and correct copy of the foregoing was served on this 4th day of September, 2013, via email, and by delivering same into the custody and care of the U.S. Postal Service, postage pre-paid, addressed to the following:

Jennifer Hans
Gregory Dutton
Assistant Attorneys General
1024 Capital Center Drive
Suite 200
Frankfort, KY 40601-8204

M. Todd Osterloch
Sturgill, Turner, Barker & Moloney, PLLC
333 West Vine Street, 1400
Lexington, KY 40507



Counsel for Fern Lake Company



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

May 31, 2013

Apollo Fuels
Tommy Lewis
PO Box 1727
Middlesboro, KY 40965

RE: Scheduled Inspection
ID of Dam: 0086
FERN LAKE DAM
Bell County, KY
Hazard Class: HIGH
Agency Interest: 6994

Dear Mr. Lewis:

The Division of Water is responsible for performing safety inspections of dams in Kentucky. Kentucky Revised Statutes Chapter 151 (KRS 151) and associated regulations establish minimum maintenance and design criteria for dams. KRS 151.125 gives the Division of Water authority to require any measures necessary to bring the dam into compliance with statutes and regulations.

As the owner you are required to maintain the dam to assure public safety. On May 2, 2013, personnel from the Energy and Environment Cabinet, Division of Water, inspected the above referenced structure. A copy of the inspection report is enclosed. Based on our visual inspection of the dam, the following deficiencies need to be corrected:

- Remove the debris from the inlet of the principal spillway.
- Fill and compact the holes on the upstream slope left from tree removal.
- Repair the ruts from mowing equipment on the berm of the downstream slope.
- Monitor the wet area on the berm for any changes and repair as necessary.
- Clean out the brush and debris from around the principal spillway outlet.
- Remove bushes and tall weeds from the shoreline.

If you have any questions concerning this matter, please contact Andrew Brooks, EIT at (502) 564-3410.

Sincerely,

Shane Cook

Shane Cook, P.E., Supervisor
Dam Safety and Floodplain Compliance Section
Division of Water

ab
Enclosure



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

**CERTIFICATE OF INSPECTION
FOR
DAM AND APPURTENANT WORKS**

Note: The Division of Water does not intend this report to be taken as an assurance that no other problems exist at this site or that this dam is safe. The reports sole intent is to provide you a factual account of the conditions observed at the site during the inspection. If you have questions, write this office at the above listed address or call (502) 564-3410.

ID of Dam:	0086	Hazard Class:	HIGH
Name of Dam:	FERN LAKE DAM	Owner:	Fern Lake Co
Agency Interest:	6994		
County:	Bell	Address:	PO Box 1727
Inspection Date:	May 2, 2013	City:	Middlesboro
		State:	KY
Weather:	Sunny, 75°F	Zip:	40965
		Phone:	606-248-1535
Inspection Type:	Dams		

Persons Present at Inspection: Andrew Brooks, Marilyn Thomas, Shane Cook, Tommy Lewis

Height of Dam:	53 feet	Normal Pool Elevation (MSL):	1200.4'
Latitude Dec Deg:	36.591667	Current Pool Elevation (MSL):	1200.5'
Longitude Dec Deg:	-83.704445	Emer. Spillway Elevation (MSL):	N/A
Type of Dam:	EARTHFILL DAM, 1080 FEET LONG WITH A TOP WIDTH OF 28 FEET 20 FT BERM ON D/S SLOPE ELEV. 1190.0; CRUSHED STONE BLANKET DRAIN; UP & D/S SLOPE AT 2.5:1; RECONST. TO HIGH HAZARD 1985		

Upstream Slope of Dam: The upstream slope has a grass cover that has been mown. There are a few bushes and weeds at the waterline that should be cut or removed. There are a few holes on the dam where large trees used to be. These holes should be filled and compacted.

Crest of Dam: The crest carries an asphalt road that is in good condition. There is some superficial cracking in the asphalt from normal weathering.

Downstream Slope of Dam: The downstream slope has a grass cover that is in good condition. The berm area on the dam is wet on the left side and there is rutting from mowing equipment.

Toe Drains: This structure does not have toe drains.

10 024 10 0

**CERTIFICATE OF INSPECTION
FOR**

KY ID: 0086

Principal Spillway: VALVE CONTROL RISER NEAR WEST END OF DAM. CONDUIT IS USED FOR WATER SUPPLY. WEIR MAINTAINS THE ELEVATION OF NORMAL POOL

Principal Spillway Comment: The principal spillway at the left end of the structure is the only spillway on the structure. The spillway was running during the time of inspection. There is some debris in the inlet that should be removed and there is some brush and debris in the outlet area that should be cleared.

Stilling Basin: This structure does not have a stilling basin.

Emergency Spillway: OPEN CONCRETE CHANNEL 150 FEET WIDE AT THE WEIR WITH A CREST AT 1200.4. SIDE SLOPES ARE VERTICAL. TWO BRIDGE PIERS ARE IN SPILLWAY. OUTLET SLOPE OF 1.69 PERCENT TO THE END OF THE CONCRETE.

Emergency Spillway Comments: This structure does not have an emergency spillway.

Drawdown System: The old drawdown is on the old riser tower. Water is drawn down now from a facility on the left shore of the reservoir.

Location of Drawdown Valve: UPSTREAM

Last Date of Operation: Unknown

Does Hazard Classification need to be Reevaluated? This structure is currently classified as a high hazard and does not need to be reclassified.

Were Photographs Taken? Yes

General Comments and Recommendations:

Overall, the structure is in good condition. On the upstream slope, the bushes and weeds at the shoreline should be removed and the holes left from the removal of trees should be filled and compacted. Repair the ruts in the berm on the downstream slope. Monitor the wet area on the left side of the berm for any changes and repair as necessary. Remove the debris in the inlet of the principal spillway. The area around the principal spillway outlet should be cleared of brush and debris.

Inspector: Andrew Brooks, EIT

Reviewer: Shane Cook, PE, Supervisor

Date: 05/06/2013



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

May 9, 2011

Fern Lake Company
P.O. Box 1727
Middlesboro, KY 40965

Re: Scheduled Inspection
ID of Dam: 0086
FERN LAKE DAM
Bell County, KY
Hazard Class: HIGH
Agency Interest: 6994

To whom it may concern:

On May 4, 2011, personnel from the Energy and Environment Cabinet, Division of Water, inspected the above referenced structure. A copy of the inspection report is enclosed. The Division of Water is responsible for performing safety inspections of dams in Kentucky.

Kentucky Revised Statutes Chapter 151 (KRS 151) and associated regulations establish minimum maintenance and design criteria for dams. KRS 151.125 gives the Division of Water authority to require any measures necessary to bring the dam into compliance with statutes and regulations. As the owner you are required to maintain the dam to assure public safety.

Based on our visual inspection of the dam, the following deficiencies need to be corrected:

- Finish mowing the downstream slope.
- Remove the brush at the waterline, the spillway retaining wall, and the spillway outlet channel.
- Remove the debris from the spillway outlet channel.
- Monitor the wet spot for any changes in color or flow.

If you have any questions concerning this matter, please contact Glen Alexander, E.I.T. at (502) 564-3410.

Sincerely,

Marilyn Thomas, P.E., C.F.M.
Dam Safety and Floodplain Compliance Section
Division of Water

Enclosure



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

**CERTIFICATE OF INSPECTION
FOR
DAM AND APPURTENANT WORKS**

Note: The Division of Water does not intend this report to be taken as an assurance that no other problems exist at this site or that this dam is safe. The reports sole intent is to provide you a factual account of the conditions observed at the site during the inspection. If you have questions, write this office at the above listed address or call (502) 564-3410.

ID of Dam:	0086	Hazard Class:	HIGH
Name of Dam:	FERN LAKE DAM	Owner:	Fern Lake Company
Agency Interest:	6994		
County:	Bell	Address:	P.O. Box 1727
Inspection Date:	May 4, 2011	City:	Middlesboro
		State:	KY
Weather:	Cloudy, 50 degrees F	Zip:	40965
		Phone:	(606) 248-1535
Inspection Type:	Dams		

Persons Present at Inspection: Glen Alexander, Mortaza Rabiee, Tom Lewis – Owner's Representative

Height of Dam:	53 feet	Normal Pool Elevation (MSL):	1200.4'
Latitude Dec Deg:	36.591667	Current Pool Elevation (MSL):	1200.5'
Longitude Dec Deg:	-83.704445	Emer. Spillway Elevation (MSL):	N/A
Type of Dam:	EARTHFILL DAM, 1080 FEET LONG WITH A TOP WIDTH OF 28 FEET 20 FT BERM ON D/S SLOPE ELEV. 1190.0; CRUSHED STONE BLANKET DRAIN; UP & D/S SLOPE AT 2.5:1; RECONST. TO HIGH HAZARD 1985		

Upstream Slope of Dam: The upstream slope has a grass cover that has been mowed. There are a few bushes at the waterline that must be removed. The slope is in good condition.

Crest of Dam: The crest carries an asphalt road that is in good condition. There are a few longitudinal and transverse cracks in the pavement that appear to be from normal weathering. No misalignment was noted.

Downstream Slope of Dam: The downstream slope has a grass cover that has been mown about 70%. The mowing should be completed. A wet spot was noted near the left end of the structure above the old spillway outlet. The standing water has a shiny appearance.

Toe Drains: There are no toe drains.



**CERTIFICATE OF INSPECTION
FOR**

KY ID: 0086

Principal Spillway OPEN CONCRETE CHANNEL 150 FEET WIDE AT THE WEIR WITH A CREST AT 1200.4'. SIDE SLOPES ARE VERTICAL. TWO BRIDGE PIERS ARE IN SPILLWAY. OUTLET SLOPE OF 1.69 PERCENT TO THE END OF THE CONCRETE. DISCHARGES INTO A ROCK CHANNEL.

Principal Spillway Comment: The principal spillway at the left end of the structure is the only spillway on the structure. The old riser tower is no longer used as a spillway. The spillway has some brush, trees, and debris in the outlet channel that must be removed. The spillway is running. The brush along the spillway retaining wall must be removed.

Stilling Basin: There is no stilling basin.

Emergency Spillway: SEE PRINCIPAL SPILLWAY.

Emergency Spillway Comments: See principal spillway.

Drawdown System: The drawdown is on the old riser tower. Its operational status is unknown.

Location of Drawdown Valve: UPSTREAM

Last Date of Operation: Unknown

Does Hazard Classification need to be Reevaluated? The structure is classified as high hazard and does not need to be reclassified.

Were Photographs Taken? Yes

General Comments and Recommendations:

Overall, the structure is in good condition. Finish mowing the downstream slope. Remove the brush from the waterline, at the spillway retaining wall, and the spillway outlet channel. Remove the debris from the spillway channel. Monitor the wet spot for any changes in color or flow.

Inspector: Glen Alexander, Mortazn Rabiee

Reviewer: Marilyn Thomas, PE

Date: 5/9/2011



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

December 3, 2009

Fern Lake Co
PO Box 1727
Middlesboro, KY 40965

Re: Scheduled Inspection
ID of Dam: 0086
FERN LAKE DAM
Bell County, Ky.
Hazard Class: HIGH
Agency Interest: 6994

Dear Fern Lake Co:

On October 14, 2009, personnel from the Energy and Environment Cabinet, Division of Water, inspected the above referenced structure. A copy of the inspection report is enclosed. The Division of Water is responsible for performing safety inspections of dams in Kentucky.

Kentucky Revised Statutes Chapter 151 (KRS 151) and associated regulations establish minimum maintenance and design criteria for dams. KRS 151.125 gives the Division of Water authority to require any measures necessary to bring the dam into compliance with statutes and regulations. As the owner you are required to maintain the dam to assure public safety.

Based on our visual inspection of the dam, the following deficiencies need to be corrected:

- The trees and brush near the toe of the structure must be cut to ensure that burrowing animals do not nest in the area.
- The cracks in the spillway channel should be monitored to ensure that they are not deteriorating.

If you have any questions concerning this matter, please contact me at (502) 564-3410.

Sincerely,

Brian Scott Phelps, P.E., CFM, Supervisor
Dam Safety and Floodplain Compliance Section
Water Resources Branch
Division of Water

Enclosure:

STEVEN L. BESHEAR
GOVERNOR



LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

July 21, 2008

Fern Lake Co
PO Box 1727
Middlesboro, KY 40965

Re: Scheduled Inspection
ID of Dam: 0086
FERN LAKE DAM
Bell County, KY
Hazard Class: HIGH
Agency Interest: 6994

Dear Fern Lake Co:

On June 13, 2008, personnel from the Natural Resources and Environmental Protection Cabinet, Division of Water, inspected the above referenced structure. A copy of the inspection report is enclosed. The Division of Water is responsible for performing safety inspections of dams in Kentucky.

Kentucky Revised Statutes Chapter 151 (KRS 151) and associated regulations establish minimum maintenance and design criteria for dams. KRS 151.125 gives the Division of Water authority to require any measures necessary to bring the dam into compliance with statutes and regulations. As the owner you are required to maintain the dam to assure public safety.

Based on our visual inspection of the dam, the following deficiencies need to be corrected:

- Continue clearing thick brush from spillway channel and downstream toe.
- Monitor the spillway channel for cracks and separation.
- Will need to riprap the upstream slope to above normal pool to prevent wave erosion if erosion problem worsens.

If you have any questions concerning this matter, please contact me at (502) 564-3410.

Sincerely,

A handwritten signature in cursive script that reads "Gary Wells".

Gary Wells, P.E.
Dam Safety and Floodplain Compliance Section
Division of Water

Enclosure:



ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Ernie Fletcher
Governor

Frankfort Office Park
14 Reilly Road
Frankfort, Kentucky 40601
www.kentucky.gov

Lajuana S. Wilcher
Secretary

May 30, 2006

Fern Lake Co
PO Box 1727
Middlesboro, KY 40965

Re: Scheduled Inspection
ID of Dam: 0086
FERN LAKE DAM
Bell County, KY
Hazard Class: HIGH

Dear Fern Lake Co:

On May 25, 2006, personnel from the Natural Resources and Environmental Protection Cabinet, Division of Water, inspected the above referenced structure. A copy of the inspection report is enclosed. The Division of Water is responsible for performing safety inspections of dams in Kentucky.

Kentucky Revised Statutes Chapter 151 (KRS 151) and associated regulations establish minimum maintenance and design criteria for dams. KRS 151.125 gives the Division of Water authority to require any measures necessary to bring the dam into compliance with statutes and regulations. As the owner you are required to maintain the dam to assure public safety.

Based on our visual inspection of the dam, the following deficiencies need to be corrected:

- Continue clearing trees and brush from spillway channel and downstream toe.
- Monitor the spillway channel for cracks and separation.
- Will need to riprap the upstream slope to above normal pool to prevent wave erosion if erosion problem worsens.

If you have any questions concerning this matter, please contact Mortaza Rabiee at (502) 564-3410.

Sincerely,

Ron Dutta, P.E., Supervisor
Dam Safety and Floodplain Compliance Section
Water Resources Branch
Division of Water

Enclosure:

**COMMONWEALTH OF KENTUCKY
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601**

**CERTIFICATE OF INSPECTION
FOR
DAM AND APPURTENANT WORKS**

Note: The Division of Water does not intend this report to be taken as an assurance that no other problems exist at this site or that this dam is safe. The reports sole intent is to provide you a factual account of the conditions observed at the site during the inspection. If you have questions, write this office at the above listed address or call (502) 564-3410.

ID of Dam:	0086	Hazard Class:	HIGH
Name of Dam:	FERN LAKE DAM	Owner:	Fern Lake Co
County:	Bell	Address:	PO Box 1727
Inspection Date:	May 25, 2006	City:	Middlesboro
Weather:	59 Deg, F, Rain	State:	KY
Inspection Type:	Dams	Zip:	40965
		Phone:	606-248-1535

Persons Present at Inspection: Mortaza Rabiee, Tony Childers, and Samantha Hall-KY Division of Water, and Tom Lewis-Fern Lake

Height of Dam:	53 feet	Normal Pool Elevation (MSL):	1200'
Latitude Dec Deg:	36.591667	Current Pool Elevation (MSL):	1200.1'
Longitude Dec Deg:	83.704445	Emer. Spillway Elevation (MSL):	NO E. S.
Type of Dam:	EARTHFILL DAM, 1080 FEET LONG WITH A TOP WIDTH OF 28 FEET 20 FT BERM ON D/S SLOPE ELEV. 1190.0 FEET; CRUSHED STONE BLANKET DRAIN, UP & D/S SLOPE AT 2.5:1; RECONST. TO HIGH HAZARD 1985		

Upstream Slope of Dam: The upstream slope has a good grass cover. No slides, slumps, animal burrows, or trees were noted. Minor wave erosion was noted.

Crest of Dam: The crest has a paved road with grass sides. No animal burrows, slides, slumps, or trees were noted.

Downstream Slope of Dam: The downstream slope is mostly mowed grass. A few small trees and tall grass/weed noted near the toe-in process of being cleared. No animal burrows, slides, or slumps were noted. A depression was noted during the last inspection-may be an area of poor drainage.

Toe Drains: The toe drain is located near the drawdown outlet.

PHILLIP J. SHEPHERD
SECRETARY



BRERETON C. JONES
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601

April 6, 1995

Mr. Gary Asher
Fern Lake Company
P.O.Box 1727
Middlesboro, KY 40965

Re: Inspection of Fern Lake Dam, No.0086
in Bell County
Hazard Class "HIGH" (C)

Dear Mr. Asher:

On April 4, 1995 personnel from the Natural Resources and Environmental Protection Cabinet, Division of Water, inspected the above-referenced structure. A copy of the inspection report is enclosed. The Division of Water is responsible for performing safety inspections of dams in Kentucky, and has the authority under Kentucky Revised Statutes Chapter 151 to require any measures necessary to make the dam safe.

By law, the owner is obligated to maintain the dam to assure public safety. We recommend that the construction joints on the wing walls of the emergency spillway be inspected and any faulty expansion material be replaced. The dam is well maintained

If you have any questions concerning this matter, please contact me at (502) 564-3410.

Sincerely,

A handwritten signature in cursive script that reads "George A. Childers".

George Childers, P.E.
Dam Safety & Floodplain Compliance Section
Water Resources Branch
Division of Water

Enclosure

PHILLIP J. SHEPHERD
SECRETARY



BRERETON C. JONES
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FRANKFORT OFFICE PARK
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601

May 5, 1993

Mr. Gary Asher
Fern Lake Co.
P.O. Box 1727
Middlesboro, Ky. 40965

Re: Inspection of Dam, No. KY0086
Bell County, Ky.
Hazard Class "HIGH" (C)

Dear Sir:

On February 10, 1993, personnel from the Natural Resources and Environmental Protection Cabinet, Division of Water, inspected the above-referenced structure. A copy of the inspection report is enclosed. The Division of Water is responsible for performing safety inspections of dams in Kentucky, and has the authority under Kentucky Revised Statutes Chapter 151 to require any measures necessary to make the dam safe.

By law, the owner is obligated to maintain the dam to assure public safety. Any deficiencies or other Division concerns should be corrected or addressed as recommended below:

1. The structure is always well maintained by the caretaker.

If you have any questions concerning this or any other matter, please contact me at (502) 564-3410.

Sincerely,

A handwritten signature in cursive script that reads "Stewart Carter".

Stewart Carter, E.E.P.
Dam Safety & Floodplain Compliance Section
Water Resources Branch
Division of Water

Enclosure



PHILLIP J. SHEPHERD
SECRETARY



BRERETON C. JONES
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601

January 27, 1995

FERN LAKE CO
P.O. BOX 233
LEXINGTON, KY 40501

Subject: 1995 DAM SAFETY INSPECTION
FERN LAKE DAM, No. KY86

Dear Owner:

The Division of Water is responsible for performing safety inspections on dams and hazardous impoundments in Kentucky. Your dam has been scheduled for inspection in 1995. If you wish to be present during our inspection or if there are any special arrangements that need to be made (e.g. unlock gates, notify tenants, etc.), please contact George Childers of this office by February 28, 1995. He may be reached at the above address or you may call him at (502)564-3410 x 418.

As owner of the dam it is your statutory duty to maintain the structure such that a visual inspection can easily be performed. In order to facilitate this, all small trees (6" diameter or less), weeds, vines and brush are to be removed from the dam and the structure is to be mowed. Care should be taken to properly fill, compact and reseed any disturbed areas. Based on our safety inspection, we will determine if a plan for the removal of larger trees and their root systems is necessary. If you know when the dam will be mowed or if you need additional time to prepare your dam for a proper inspection, please inform us and we will try to schedule our inspection accordingly.

The Kentucky Division of Water published a booklet titled: Guidelines for Maintenance and Inspection of Dams in Kentucky. This booklet should address most of your questions regarding the care of your dam. If you do not have this publication, please contact us and we will send you a copy.

As you are probably aware, modifications to a dam (e.g. increasing the height, modifying the spillway, adding a fish trap, breaching the embankment, etc.) require a Division of Water Stream Construction Permit before any work can begin. I would like to take this opportunity to remind you of other instances that warrant special attention. For example, new development downstream of a dam classified as low or moderate hazard, changes in ownership, overtopping of the embankment by flood water, as well as the appearance of any new structural deficiency (e.g. slump, crack or seep), all need to be reported to this office. This type of information enables us



Printed on Recycled Paper
An Equal Opportunity Employer M/F/D



Steven L. Beshear
Governor

Mark David Goss
Chairman

Robert D. Vance, Secretary
Environmental and Public
Protection Cabinet

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

John W. Clay
Vice Chairman

Larry R. Bond
Commissioner
Department of Public Protection

Caroline Pitt Clark
Commissioner

March 10, 2008

TO ALL JURISDICTIONAL WATER AND SEWER UTILITIES:

The Commission's regulation 807 KAR 5:006, Section 26, requires each utility to notify the Commission within two (2) hours following discovery of any utility related accident which results in death or serious injury to any person, or any incident which has or may result in substantial property damage or substantial loss of service (loss of service for four (4) or more hours to ten (10) percent or five hundred (500) or more of the utility's customers, whichever is less). A summary written report on all accidents shall be submitted to and received by the Commission within seven (7) calendar days from the date of the accident or incident.

Prompt notice shall be given to the Commission via telephone at the numbers listed below or by electronic mail to: PSCWATERNOTICE@mail.state.ky.us. Detailed follow-up information may also be faxed to: (502) 564-1582.

The following is a list of Commission personnel and their telephone numbers:

<u>Type of Utility</u>	<u>Primary Contact</u>	<u>Business Hours</u>	<u>Non-Office</u>
Water	Jimmy Adcock	(502) 564 3940	(502) 330-5984
	Joe Greenwell	(502) 564 3940	(502) 330-5983
Sewer Water or Sewer	Brian Rice	(502) 564 3940	(502) 330-5986
	James Rice	(502) 564 3940	(502) 863-2921
	Bob Robards	(502) 564-3940	(859) 582-5124
	George W. Wakim, Mgr.	(502) 564 3940	(859) 797-2487

During non-office hours, staff can be contacted at their residence phone numbers provided. In the event a primary contact person is not available, I am the alternate contact person and may be reached during business hours at (502) 564-3940 and at any other time at (502) 229-3039. Please remember that notification to Commission's voice mailbox or FAX number during non-office hours, will not be considered proper notification.

Further, 807 KAR 5:066, Section 3 (4) (b) requires water utilities to provide to the Commission a copy of any public notification required by and pursuant to the regulations of Natural Resources Cabinet. Such notifications can be, but not limited to, boil water advisories, boil water notices, and their corresponding lifting notifications.

You are requested to acknowledge receipt of this letter by returning the attached form by April 14, 2008. Further, you should disseminate this information to appropriate personnel within your organization.

Sincerely,

Jim Welch
Director, Division of Engineering



STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

**CERTIFICATE OF INSPECTION
FOR
DAM AND APPURTENANT WORKS**

Note: The Division of Water does not intend this report to be taken as an assurance that no other problems exist at this site or that this dam is safe. The reports sole intent is to provide you a factual account of the conditions observed at the site during the inspection. If you have questions, write this office at the above listed address or call (502) 564-3410.

ID of Dam: 0086
Name of Dam: FERN LAKE DAM
Agency Interest: 6994

Hazard Class: HIGH
Owner: Fern Lake Co

County: Bell
Inspection Date: June 13, 2008

Address: PO Box 1727
City: Middlesboro
State: KY
Zip: 40965
Phone: 606-248-1535

Inspection Type: Dams

Persons Present at Inspection: Gary Wells, Mortaza Rabiee

Height of Dam: 53 feet
Latitude Dec Deg: 36.591667
Longitude Dec Deg: -83.704445

Normal Pool Elevation (MSL): 1200'
Current Pool Elevation (MSL): 1200.1'
Emer. Spillway Elevation (MSL): NO E.S.

Type of Dam: EARTHFILL DAM, 1080 FEET LONG WITH A TOP WIDTH OF 28 FEET, 20 FT BERM ON D/S. SLOPE ELEV. 1190.0; CRUSHED STONE BLANKET DRAIN; UP & D/S SLOPE AT 2.5:1; RECONST. TO HIGH HAZARD 1985

Upstream Slope of Dam: The upstream slope has a good grass cover. No slides, slumps, animal burrows, or trees were noted. Minor wave erosion was noted.

Crest of Dam: The crest has a paved road with grass sides. No animal burrows, slides, slumps, or trees were noted.

Downstream Slope of Dam: The downstream slope is mostly mowed grass. We did locate one animal burrow, however, there were no other animal burrows, slides, or slumps were noted.

Toe Drains: The toe drain is located near the drawdown outlet.



2008 Update

Please type or print and mail to:

TO: George W. Wakim, P.E., Manager
Water & Sewer Branch
Division of Engineering
Public Service Commission
P. O. Box 615
Frankfort, KY 40602
(502) 564-3940, EXT. 409; Fax (502) 564-1582

Name of Chairman or President (if applicable): GARY ASHER

Name of Manager: TOMMY LEWIS

Signature: Gary Asher Title: President Date: _____
(preparer)

Name of water or sewer system:

Name: FERN LAKE COMPANY

Address: P.O. BOX 1727

Middlesboro, Ky. 40965

Office Telephone Number: (606) 248-1535

Utility e-mail address and/or website address: _____

Utility's 24-hour emergency phone # (606) 248-7177

1. Emergency Staff TOMMY LEWIS

Office Phone # 606-248-7177 FAX # 606-248-6141

Mobile # 606-269-1791 Pager # _____

Emergency # 606-248-7177 (home telephone, etc.)

2. Other Emergency Staff _____

Office Phone # _____ FAX # _____

Mobile # _____ Pager # _____

Emergency # _____ (home telephone, etc.)

3. Other Emergency Staff _____

Office Phone # _____ FAX # _____

Mobile # _____ Pager # _____

Emergency # _____ (home telephone, etc.)

**GUIDELINES FOR MAINTENANCE AND INSPECTION
OF DAMS IN KENTUCKY**



**KENTUCKY NATURAL RESOURCES
AND ENVIRONMENTAL PROTECTION CABINET
DIVISION OF WATER**



JULY, 1985

**GUIDELINES FOR MAINTENANCE AND INSPECTION
OF DAMS IN KENTUCKY**

**KENTUCKY NATURAL RESOURCES
AND ENVIRONMENTAL PROTECTION CABINET
DIVISION OF WATER**



JULY, 1985

INDEX

<u>SUBJECT</u>	<u>PAGE</u>
Acknowledgements	ii
Caulk Dam Failure	iii
Introduction	1
2. General Information	1
A. What is a "dam"?	1
B. State Permits and Inspections	
C. Regular Maintenance and Inspection is Essential	
3. Prominent Types of Failures	2
A. Hydraulic Failures	2
B. Seepage Failures	2
C. Structural Failures	2
4. What are the Main Elements of a Dam	6
A. Embankment	6
B. Principal Spillway	8
C. Emergency Spillway	8
D. Drawdown Facility	8
5. Maintaining Your Dam Properly	8
A. Embankment	10
B. Principal Spillway	10
C. Emergency Spillway	11
D. Drawdown Facility	12
6. Inspecting Your Dam Regularly	15
A. Seepage	15
B. Erosion	15
C. Cracks	16
D. Slides and Slumps	16
E. Subsidence	16
F. Vegetation	17
G. Boils	17
H. Animal Burrows	17
I. Debris	18
7. Report of Emergencies	27
LIST OF TABLES, FIGURES, AND PLATES	
Table 1 Hydraulic Failures	3
Table 2 Seepage Failures	4
Table 3 Structural Failures	5
Figure 1 Elements of a Dam	
Figure 2 Typical Principal Spillway and Drawdown Facility Arrangement	9
Plates 1 & 2	13
Plates 3 - 10	19

ACKNOWLEDGMENTS

The Division of Water wishes to express its gratitude to the following:

Mr. Harry Keith Honaker, P.E., formerly with Kentucky Division of Water, for the compilation of this publication.

Dr. George F. Sowers, Regents Professor of Civil Engineering, Georgia Institute of Technology; Chairman of the Board/Consultant, Law Engineering Testing Company, Atlanta, Georgia, for the information on Earth Dam Failures.

Dr. Bruce A. Tschantz, Associate Professor of Civil Engineering, University of Tennessee, for his valuable assistance, information, and comments on the contents of this booklet.

Dr. Staley F. Adams, Professor of Civil Engineering, University of Kentucky and students in the Division of Water Training Program at the University of Kentucky for the assistance in compiling the information and illustrations.

The Engineering Foundation Conference and Dr. Sanford S. Cole for the information obtained from conferences held by the Engineering Foundation on Dam Safety.

The Federal Emergency Management Agency for funds to reprint the publication; the views expressed in this publication are not necessarily those of the funding agency.

Other state agencies for information including invaluable lessons learned through experience.

**Caulk Dam Failure
Taylor County, Kentucky
December, 1973**



(11)

1. INTRODUCTION

Guidelines for Maintenance and Inspection of Dams was prepared to help you maintain and inspect your dam on a regular schedule—to detect problems and prevent a failure of the dam.

Experience in Kentucky and other states shows that when dams are not properly maintained, it's usually because the owners don't understand the techniques necessary for a maintenance program. Understanding and following the guidelines in this booklet may prevent a catastrophic failure of your dam.

2. GENERAL INFORMATION

A. WHAT IS A "DAM"?

Kentucky statutes (KRS 150.100) defines a dam as any artificial barrier (including appurtenant works) which does, or can, impound or divert water and is, or will be:

- (1) twenty-five feet or more high from the natural bed of the stream or watercourse at the downstream tow of the barrier, as determined by the Department for Environmental Protection, or
- (2) has, or will have an impounding capacity of fifty acre-feet or more at the maximum water storage elevation.

B. STATE PERMITS AND INSPECTIONS

Since 1948 anyone in Kentucky proposing to construct a dam has been required to submit a plan to the state for review to obtain a permit. In 1966, adoption of guidelines for evaluating dams was required by a revision made to the law.

In 1974, the permit system was revised to include regular state inspections of dams—KRS 150.295 directs the Secretary of the Natural Resources and Environmental Protection Cabinet to inspect dams and reservoirs on a regular schedule.

C. REGULAR MAINTENANCE AND INSPECTION IS ESSENTIAL

A dam failure can cause considerable loss of capital investment, loss of income, and even tragic loss of life. Some lakes have existed for such a long time that their pools have been accepted as the natural level, and many homes, industries and utilities rely on the maintenance of the lake at the existing level. They depend on the owner to properly operate, maintain and inspect the dam to prevent the creation of hazardous conditions to downstream properties and residents.

Aside from moral obligation to keep the dam safe, the owner could be subjected to liability claims, or even criminal charges, if the dam fails. So it's good business practice to have an effective program of maintaining and inspecting you dam.

This booklet will help you to inspect your dam, but it's not intended as a design manual for making repairs. Use it to tell you when to call in a professional. Remember that all problems may not be exposed in the course of your maintenance and visual inspection. Do not rely on "home remedies". Call in an experienced design engineer to remedy problems.

3. PROMINENT TYPES OF DAM FAILURE

Dam failures are usually produced by improper design, construction, and maintenance. All dams built in the future must follow guidelines in the regulations, and problems will hopefully be minimized.

On many older dams, very little is known about their design and construction, so most conclusions are based on knowledge from superficial inspections. With these older structures it is important to be aware of the prominent types of failures and the tell-tale signs they may warn you of failure.

Earth dam failures can generally be grouped into three classifications, briefly described below:

A. HYDRAULIC FAILURE:

Hydraulic failures result from the uncontrolled flow of water over the dam, around the dam, and adjacent to the dam, plus the erosive action of water on the dam and its foundation. Earth dams are particularly susceptible to hydraulic failure since earth erodes at relatively small velocities.

B. SEEPAGE FAILURE:

All dams exhibit some seepage, which must be controlled in velocity and amount. Seepage occurs both through the dam and the foundation. If uncontrolled, it can erode material from the foundation of an earth dam to form a conduit through which water can pass, which often leads to complete failure of the structure. This phenomenon is known as "piping".

C. STRUCTURAL FAILURE:

Structural failure involves the rupture of the dam and/or its foundation. This is particularly a hazard for large dams and for dams built of low strength materials such as silts, slag, fly ash, etc.

Dam failures generally result from a complex interrelationship of these failure modes. Uncontrolled seepage may weaken the soils and lead to a structural failure. A structural failure may shorten the seepage path and lead to piping failure. Surface erosion may lead to structural or piping failures. Tables I, II and III give a summary of failure and possible remedies.

TABLE I

FORM	CHARACTERISTICS	CAUSES	PREVENTIVE OR CORRECTIVE MEASURES
HYDRAULIC FAILURES (30% of all failures - less in dams under 50 ft.)			
Overtopping	Flow over embankment, washing out dam	Inadequate spillway capacity Clogging of spillway with debris Insufficient freeboard due to settlement, skimpy design	Spillway designed for maximum flood Maintenance; trash booms; clean design Allowance for freeboard and settlement in design; increase crest height or add flood parapet
Wave Erosion	Notching of upstream face by waves, currents	Lack of riprap, too small riprap	Properly designed riprap
Toe Erosion	Erosion of toe by outlet discharge	Spillway too close to dam Inadequate riprap	Training walls Properly designed riprap
Gullying	Rainfall erosion of dam face	Lack of sod or poor surface drainage	Sod; fine riprap; surface drains

SOURCE: George F. Sowers
Chairman of the Board/Consultant
Law Engineering Testing Company

FORM	CHARACTERISTICS	CAUSES	PREVENTIVE OR CORRECTIVE MEASURES
SEEPAGE FAILURES (40% of all failures)			
Loss of Water	Excessive loss of water from reservoir and/or occasionally increased seepage or increased ground water levels near reservoir	Pervious reservoir rim or bottom	Blanket reservoir with compacted clay or chemical admix; grout seams, cavities
		Pervious dam foundation	Use foundation cutoff; grout; upstream blanket
		Pervious dam	Impervious core
		Leaking conduits	Watertight joints; waterstops; grouting
		Settlement cracks in dam	Remove compressible foundation; avoid sharp changes in abutment slope; compact soils at high moisture
		Shrinkage cracks in dam	Use low plasticity clays for core; adequate compaction
Seepage Erosion or Piping	Progressive internal erosion of soils from downstream side of dam or foundation backward toward the upstream side to form an open conduit or "pipe". Often leads to a washout of a section of the dam.	Settlement cracks in dam	Remove compressible foundation; avoid sharp changes; internal drainage with protective filters
		Shrinkage cracks in dam	Low plasticity soil; adequate compaction; internal drainage with protective filters
		Pervious seams in foundation	Foundation relief drain with filter; cutoff
		Pervious seams, roots, etc. in dam	Construction control; core; internal drainage with protective filter
		Concentration of seepage at face	Toe drain; internal drainage with filter
		Boundary seepage along conduits, walls	Stub cutoff walls, collars; good soil compaction
		Leaking conduits	Watertight joints; waterstops; durable materials
		Animal burrows	Riprap wire mesh

SOURCE: George F. Sowers, Chairman of the Board/Consultant, Law Engineering Testing Company

TABLE III

FORM	CHARACTERISTICS	CAUSES	PREVENTIVE OR CORRECTIVE MEASURES
STRUCTURAL FAILURES (30% of all failures - less in dams under 50 ft.)			
Foundation Slide	Sliding of entire dam, one face or both faces in opposite directions, with bulging of foundation in the direction of movement	Soft or weak foundation Excess water pressure in confined sand or silt seams	Flatten slope; employ broad berms; remove weak material; stabilize soil Drainage by deep drain trenches with protective filters; relief wells
Upstream Slope	Slide in upstream face with little or no bulging in foundation below toe	Steep slope Weak embankment soil Sudden drawdown of pond	Flatten slope or employ berm at toe Increased compaction; better soil Flatten slope; rock berms; operating rules
Downstream Slope	Slide in downstream face	Steep slope Weak soil Loss of soil strength by seepage pressure or saturation by seepage or rainfall	Flatten slope or employ berm at toe Increased compaction; better soil Core; internal drainage with protective filters; surface drainage
Flow Slide	Collapse and flow of soil in either upstream or downstream direction	Loose embankment soil of low cohesion triggered by shock, vibration, seepage, or foundation movements	Adequate compaction

SOURCE: George F. Sowers
Chairman of the Board/Consultant
Law Engineering Testing Company

4. WHAT ARE THE MAIN ELEMENTS OF A DAM?

The main elements of an earth-fill dam—and most dams in Kentucky are earth-fill dams—are the embankment and foundation, the principal or mechanical spillway, the emergency spillway, and the drawdown facility.

The following descriptions of these elements will acquaint you with the nomenclature, or terms, used in the parts of this booklet on maintenance and inspection. Figure 1 shows the elements of a typical earth dam and illustrates the nomenclature followed in this booklet.

- A. The embankment is the primary part of the dam. It's the section which impounds the lake and holds the water. Earth-fill embankments fall into two main classifications: homogeneous and zoned.

A homogeneous embankment is composed of essentially the same material throughout, while a zoned embankment is divided into zones where different materials, such as rock, are incorporated into some areas.

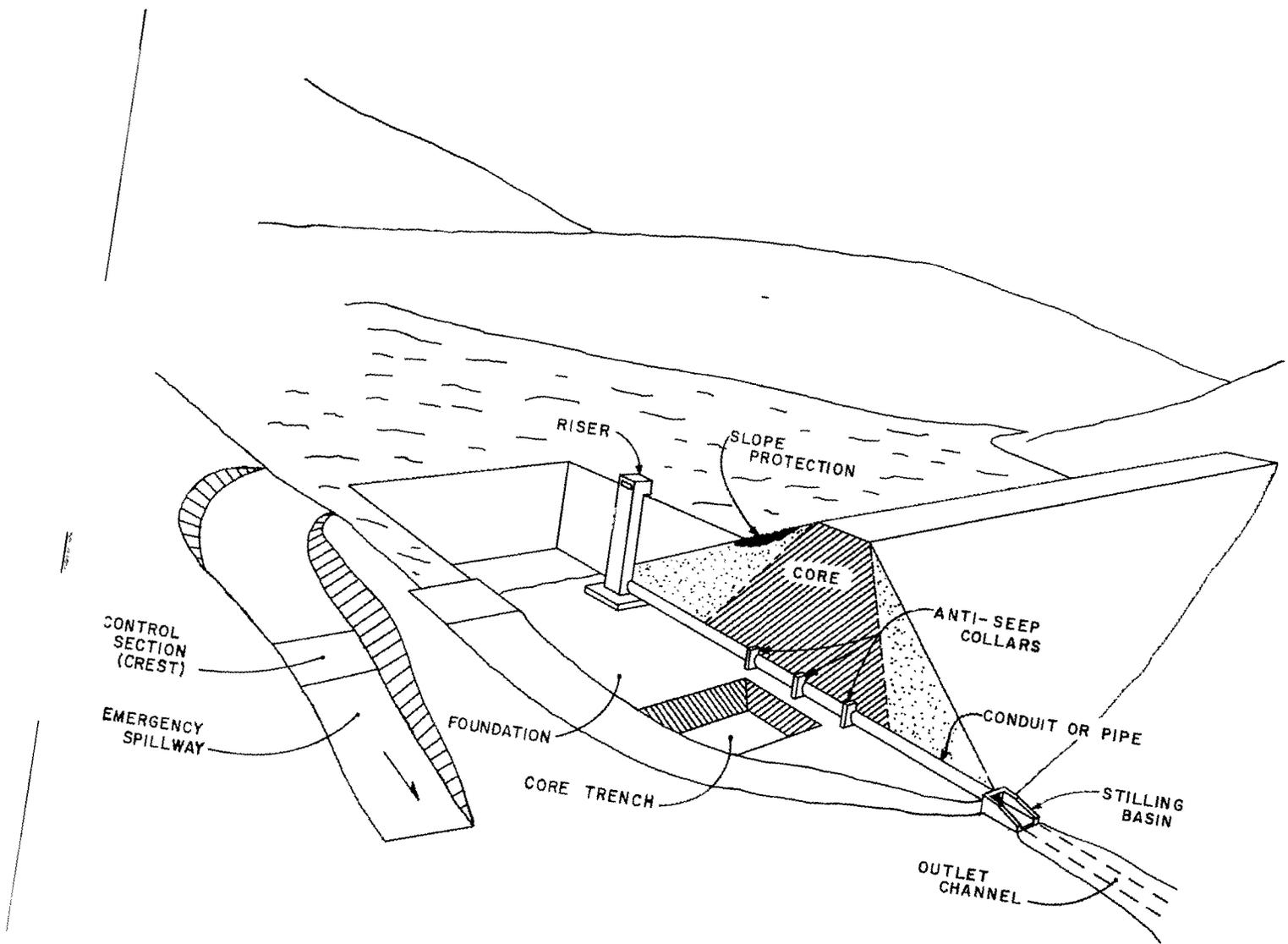
Most dams are zoned to some degree with compacted clay forming a relatively impermeable zone for cutting off water flow. A cutoff core trench is used in many dams to prevent the flow of water through the foundation material. The impermeable clay zone is generally surrounded by a more pervious material, which will allow drainage. Seepage through the dam is collected and controlled by means such as toe drains, rock toes, drainage blankets, relief wells, and chimney drains. All of the seepage control systems involve a means of filtering the clay particles from the seepage and a method of discharging the water in a safe manner.

The foundation material must have the strength to safely support the embankment and reservoir. Seepage through the foundation must be controlled in such a manner that the embankment will be stable under the design conditions and that the dam will store water for its intended purpose.

The slopes of the embankment must be vegetated to protect from the erosive effects of rain. The upstream slope must have protection from wave action. This is usually accomplished by a rock blanket (riprap) or by a berm.

The dimensions of the dam depend on the purpose and the hazard classification of the structure. The top width is a function of height, but is sometimes enlarged to accommodate a roadway. The steepness of the slopes is a function of the material used in construction, but is affected by such things as maintenance and access.

The hazard classification of the structure dictates minimum storms, which the dam must be able to withstand. Regulations have guidelines for the minimum storms on which the design is based and depend on the hazard classification. The top of the dam must be at an elevation sufficient to pass the freeboard storm and any accompanying wave height. An earth dam can fail rapidly if it is overtopped.



FIGURE

- B. The principal or mechanical spillway is the spillway, which maintains the normal water level of the lake. This spillway is usually either a metal or concrete pipe through the dam and usually incorporates a stand pipe or riser intake structure. The principal spillway's function is to pass normal amounts of water past the dam in a safe and nonerosive manner. The intake structure must have provisions to prevent its clogging with trash and debris. Figure 2 depicts some typical principal spillway arrangements.
- C. The emergency spillway is, as the term implies, a spillway, which functions in emergency conditions to prevent overtopping of the dam. The most typical form of the emergency spillway is an excavated channel in earth or rock near the dam. The function of the emergency spillway is to pass the freeboard storm without overtopping the dam. The spillway should always discharge away from the dam and should be constructed in such a manner that the spillway will not fail due to erosion when it functions. Failure of the spillway can be as catastrophic as failure of the dam. Discharge of the spillway onto the dam can rapidly erode the embankment and cause failure of the dam.

Many of the older dams in Kentucky incorporate the functions of both the principal spillway and emergency spillway into a single structure. These structures are generally in the form of concrete overflow sections or large culverts. Regardless of the form, the spillway systems must be able to pass the freeboard storms in a safe manner so the dam will not be overtopped.

- D. The drawdown facility provides a means for draining the pool. All dams should have a drawdown facility for reasons of fluctuating pool level, to kill weeds and mosquitoes, to lower the water level for repairs to the dam, and to drain the lake when failure of the dam may be imminent. The drawdown facility is generally a pipe with a valve, which may be operated as necessary. Many times the drawdown facility is incorporated into the principal spillway design in the form of a gate valve in the riser. Regulations now require the drawdown valve to be located on the upstream end of the conduit. This assures minimum water pressure in the conduit and minimizes the risk due to an internal rupture of the pipe.

The drawdown facility, when separate from the principal spillway facility, must have a careful placement and compaction and anti-seep collars for the same reasons listed in the paragraph on principal spillways.

Common arrangements of the drawdown facility are shown in Figure 2.

5. MAINTAINING YOUR DAM PROPERLY

The maintenance will be discussed in relation to the main elements of the dam. Several items are applicable to different elements. The maintenance of all elements needs to be viewed as an entity rather than maintaining each element separately.

TYPICAL PRINCIPAL SPILLWAY
8
DRAWDOWN FACILITY ARRANGEMENTS

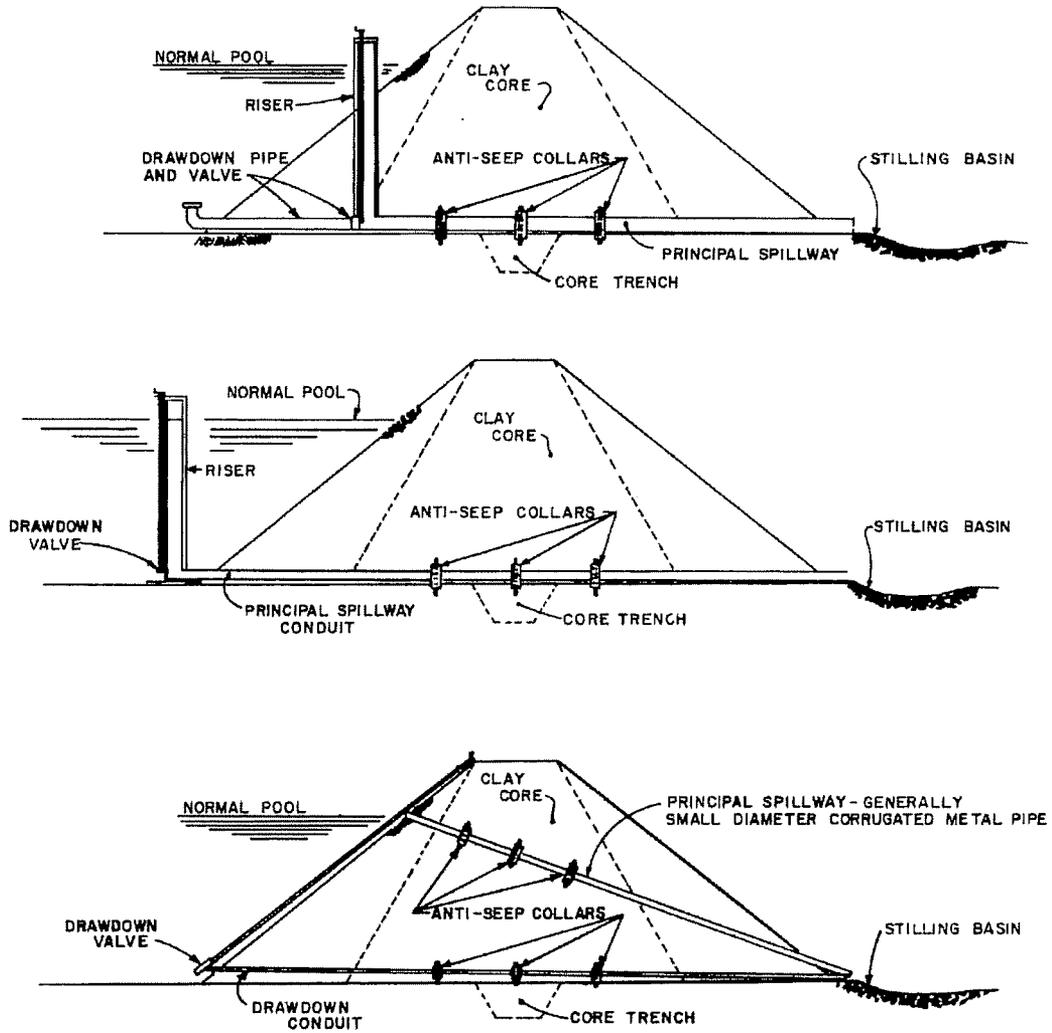


FIGURE 2

A. Embankment

1. Vegetation: A good cover of grass should be established and maintained.
 - a. Seed, fertilize, and mulch areas, which are refilled, barren, or thinly vegetated. Apply fertilizer applications at regular intervals. Watering may be necessary in dry seasons.
 - b. Mow the vegetation as needed. Mowing allows the grasses to establish a thick erosion-resistant sod and also makes it much easier to detect any potentially dangerous conditions such as seepage, erosion channels, cracks, and burrowing animals.
2. Trees and Brush: Removal and prevent the growth of trees and brush. These develop large roots systems, which can provide seepage paths. Toppling of these can leave large holes, which can weaken the embankment. Brush, vine, and kudzu obscure the surface, limit inspections, and provide a haven for animals.
3. Erosion: Erosion control and repair is essential. Refill and compact all erosion channels on the dam. Erosion channels occur on all areas of the dam, but are frequently most severe along the line of contact at the abutments.
4. Slumps: the repair of slumps and slides on the dam is important. A slump occurs for many reasons such as improper compaction, side slopes being too steep, and as a result of seepage. Determine the cause of the slump before repair. Correcting the underlying causes will save you time, labor, and expenses over the life of the structure.
5. Wave Protection: Slope protection is particularly susceptible to weathering. The action of waves, rain, freezing, and mechanical impacts can cause the movement, settlement, and/or destruction to conform to the original section of the embankment.
6. Animals: The dam and surrounding area should be free of animal traffic and habitation. Domesticated animals can damage the sod covering, especially if the cover is thin or the dam is wet from rainfall. Overgrazing can reduce the erosion resistance of the vegetation. Keep burrowing animals off of the dam by whatever means necessary. If dens are found, promptly repair them.

B. Principal Spillway:

1. The primary purpose of the spillway is to pass normal flows of water in a safe manner. If this is not being accomplished, then actions must be taken to accomplish it.
2. The conduit, or pipe must be sound and watertight. The conduit must have the strength to support the external loads of the embankment and lake. When the pipe is composed of jointed sections, those sections must be properly designed to remain watertight.

Immediately repair a collapsed or separated of any portion of the pipe; this will usually involve drawing down the lake, and probably reconstructing part of the embankment.

3. All concrete structures should be sound and on firm foundations. Back fill with any undermining and tightly seal with mastic joint filler. Any weep holes or drains associated with concrete structures should be open and functional. Failure to keep drains operative can cause damage to concrete structure and major cost in repairs.
4. The principal spillway must pass flows in a manner, which is not erosive to the dam, foundation or the spillway. Erosion at the principal spillway outlet is caused by the high velocity of the flow. Unchecked erosion can cause failure of the structure. Use measures such as stilling basins to minimize erosion. Stilling basins are generally constructed of riprap or concrete.
5. Obstruction of the principal spillway caused a reduction of flow carrying capacity and consequent increase in use of the emergency spillway with increased possibility of hydraulic failure of the structure. Principal spillways should be equipped with trash racks and these racks must be cleaned as a part of regular maintenance.

C. Emergency Spillway

1. The function of the emergency spillway is to convey flood flows past the dam so the dam is not overtopped. This function must be accomplished.
2. The earth portion of the spillway will require vegetation like that on the embankment. Grasses should be thick, well-bedded sods that is mown and fertilized regularly. Barren areas and thinly vegetated areas reseed and fertilize. Keep the spillway area free of trees and brush.
3. Repair and vegetate all erosion gullies, slides and slumps as soon as they occur. Erosion repair in earth spillways is of particular importance after any period of flow in the spillway. The outlet channel and control sections of spillways are prime erosion areas and their repair is crucial because erosion can expand very rapidly in the spillway.
4. On dams with combined principal and emergency spillways, concrete structures are prominent. The concrete must be kept sound by filling joints and cracks with mastic filler. Keep drains in concrete structures open and functional. In earth spillways, concrete is used to form control sections and chutes. Keep this concrete sound and functional.
5. Keep the emergency spillway area clear of trash, debris, and undesirable vegetation such as trees and brush. Other obstacles are buildings, fences, fish screens, and guardrails. If left in place, all these obstructions can catch trash and reduce the capacity of the spillway, which can cause hydraulic failure of the embankment.

D. Drawdown Facility

1. The drawdown facility must be tested periodically to make sure it is functioning. It must be operable at any time for various purposes, including need for water downstream, repair of spillway structures, and repair of the embankment.
2. The drawdown should be used in a controlled manner so erosion is minimized. Drawdown facilities typically discharge into stilling basins or other erosion resistant structures.

Photographs of some dams on the following pages indicate the general appearance of a properly maintained structure.

Photo A: An example of a well maintained dam and spillway.



Photo B: Note stand of dense, well mown grass. Inspection will easily reveal any cracks, erosion, seepage, etc.

Photo C: An example of well maintained downstream slope and principal spillway.



Photo D: A vegetated spillway. Grass is dense and mown just as on dam.

6. Inspecting Your Dam Regularly

The regular inspection of dams is the heart of your care and maintenance program. Only by regular inspection can problems be detected at early stages. Early detection and remedy are essential to preserve the integrity of your structure.

Inspections should include areas other than the dam and spillway. The scope of the inspection should include areas downstream, on the abutments, and a general overview of the pool area. The dam and lake areas have to be viewed in the proper perspective with the surrounding terrain. Failure to do so ignore the possibility of unseen problems in the valley and abutments, which can be influenced by the dam and lake.

During an inspection, the owner should be aware of various signs of danger. These danger signs are often not detected unless the inspection is thorough and the dam has been properly maintained. An inspection cannot be adequately performed by driving at 30 miles per hour and seeing if the dam is there. Signs of danger that should be searched for are the following:

A. Seepage

The appearance of seepage on the downstream slope, abutments, of downstream area is cause for concern.

The type and quantity of seepage should be studied. If the water is muddy murky and is coming up from a well-defined hole, material is probably being eroded from inside the embankment and a potentially dangerous situation can develop. This type of problem requires immediate attention to stop the removal of material and control the seepage. Failures due to piping are examples of this type of seepage problem.

If the water is clear, it may be coming from an older hole and should be monitored closely for any changes in color and quantity.

Seepage can also occur on abutments, under spillways, and through the foundation and may at times exit some distance from the dam. Generally speaking, the further seepage exits from the dam, the less the probability of danger. However, it is important that all areas of seepage related to the dam be watched for changes.

B. Erosion

Erosion on the dam and spillway is one of the most evident signs of danger. The size of erosion channels and gullies can increase greatly with slight amounts of rainfall. Early detection of erosion channels can greatly facilitate necessary repairs of refilling, regading, and revegetation. Left unattended, erosion can reach proportions, which damage the integrity of the dam.

Erosion along the water line due to wave action is another visible danger sign easily detected. Remedies usually involve refilling the area with rock or earth and the necessary revegetation.

Erosion from seepage through the dam, foundations, and abutments is a danger signal. This is more difficult to repair due to the seepage water. Repair generally involves the refilling of the areas, along with measures to collect and filter the seepage water. Repairs usually require the services of an engineer.

C. Cracks

The entire embankment should be closely inspected for cracks. Short isolated cracks are not usually significant, but larger, well-defined cracks indicate a problem is developing. Cracks are of two types: transverse and longitudinal.

Transverse cracks appear perpendicular to the axis of the dam and indicate settlement of the dam. Such cracks are an available avenue for seepage water and piping could develop very quickly.

Longitudinal cracks run parallel to the axis of the dam and may be the signal for a slide or slump on either face of the dam.

Cracks usually call for lowering the lake and taking reconstruction measures. They generally require the consultation of an engineer for remedy.

Cracks may be evident in other areas such as spillway cuts and landslides around the pool area.

D. Slides and Slumps

Slides and slumps are usually the most detectable danger signal. A massive slide can mean catastrophic failure of the dam. Slides occur for many reasons, and their occurrence can mean major reconstruction effort.

Slides and slumps are normally preceded by cracks and regular inspection can prevent sudden failure. Repair will usually involve the lowering of the pool, but this can cause slides on the dam and around the pool in saturated material if the drawdown is too rapid.

Remove slides in the spillway areas immediately since their presence reduced hydraulic capacities. Slides into the lake area can cause the sudden displacement of the lake volume and overtopping of the embankment.

E. Subsidence

Subsidence is vertical movement of the foundation materials due to failure of consolidation. Rate of subsidence may be so slow that its detection can go unnoticed without proper inspection procedures.

Foundation settlement is the result of placing the dam and reservoir on an area not having suitable strength or over collapsed caves or mines. At its onset subsidence refers to movement over and beyond that anticipated. Subsidence may not have any well-defined cracks or seepage associated with it.

Danger signals of subsidence include conduit displacements or separations at joints, conduit ruptures or collapses, and associated with it.

Conduit separations or ruptures can result in water leaking into the embankment and the subsequent weakening of the dam. Pipe collapse can result in hydraulic failures due to diminished capacity. It should be noted that rigid pipes, such as concrete pipes, are most likely to separate and crack, while flexible pipes, such as metal pipe conduits, are more subject to collapse.

Structure movements can be noticeable signs of subsidence. Listing or tilting of structures set in foundation material is signs of distress. Movements of intake or discharge structures can cause loss of function or conduits and diminished hydraulic capacities as well as endangering the stability of the dam due to introduction of water at conduit rupture points.

Subsidence is measured on embankments by referencing of some permanent type of markers on the dam and associated structures to points off the dams. Check elevations regularly for readings, which can give indications of subsidence.

F. Vegetation

A prominent danger signal is the appearance of undesirable types of vegetation such as cattails, reeds, mosses, and other wet area types of vegetation. The "wet environment" types of vegetation can be a sign of seepage.

Prominent areas for undesirable vegetation are the toe of the dam, the area downstream, and the abutments. Look closely in these areas for signs of seepage and take appropriate measures as discussed under the paragraphs on seepage. Maintenance on these areas should involve the mowing and clearing necessary to maintain the regular inspection of changes in seepage.

G. Boils

Boils are a serious danger signal and indicate seepage water exiting under some pressure. Boils typically occur in areas downstream of the dam. In boils, material is being removed and measures must be taken to filter and discharge the seepage in a controlled manner. To determine the cause and provide a permanent remedy, you will usually need to consult an engineer.

H. Animal Burrows

Animal burrows are a potential danger area. Inspection should include a careful search for dens on the dam and abutments. Remedies should include the removal of the animals and the refilling of dens made by the animals.

I. Debris

The collection of debris on the dam and spillways has a potential for danger. Remove debris as soon as possible so it cannot reduce the function of spillways, damage structures and valves, and destroy vegetative cover.

Photographs on the following pages are illustrative of the items mentioned above and are the types of problems, which can be readily identified by the owner during his inspection and maintenance program. Remedial measures undertaken at the early stages of a problem can usually save you effort and expense.



Photo E: Uncontrolled seepage eroding material from downstream slope. Measures must be taken to fill and discharge water in a nonerosive manner.



Photo F: Sand boils in an outlet channel below a dam. The seepage must be filtered and discharged.



Photo Failure dam along
the principal spillway
due "piping"

Photo H Note section which
failed and depth of
water Water impound-
ded not very deep.



Plate



Photo I: Erosion down abutment. Repair will include refilling gully and revegetation.



Photo J: Erosion along shoreline due to wave action and water level fluctuation. Maintenance will require some riprap or erosion resistant vegetation.



Photos K and L: The onset of a major slump is indicated by well-defined cracks and displacement. Downstream slope is steep and repair measures will require flattening of slope.



Plate 6



Photo M: Slump on downstream slope. Repair will be a major reconstructive effort. Maintenance has been minimal.

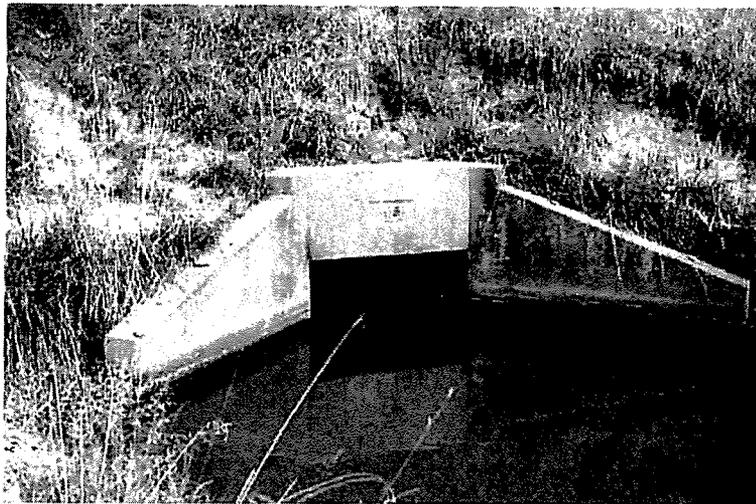
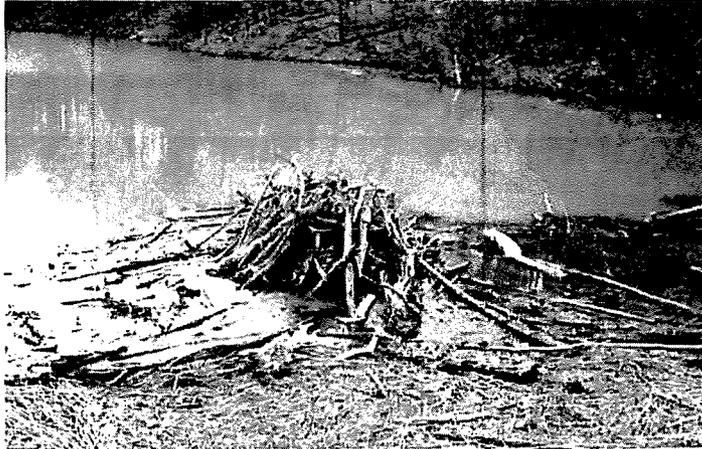


Photo N: Slump on downstream slope. Material has covered drawdown and rendered it inoperable.

Photos O and P: Wet area vegetation. Prominent are willows and cattails. This type of vegetation usually indicates uncontrolled seepage through the dam or foundation.



Plate 8



Photos Q and R: Collections of debris at the riser and shoreline. Debris had damaged trash rack on riser and further flows could reduce hydraulic capacities. Debris on shoreline should be removed as well as that on riser.



Plate 9

Photos S and T: Consequences of the lack of inspection and proper maintenance of dams.



7. REPORT OF EMERGENCIES

In the event that the owner notices conditions that indicate the structure may be in a state of failure, actions must be taken to reduce the potential effects of failure. The following office should be contacted immediately by telephone:

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division of Water
14 Reilly Road, Fort Boone Plaza
Frankfort, Kentucky 40601
Telephone: (502) 564-3410

After 4:30 p.m. or before 8:00 a.m. Eastern Time, call Disaster and Emergency Services at (502) 564-7815 for assistance.

In addition, local authorities in the city and county and the local Civil Defense Office should be contacted. If danger signals or potential hazardous conditions are spotted in time, action can hopefully be initiated which will minimize any dangers or hazards, which would result in catastrophic failure of the dam.

Goss Samford, PLLC
Suite B130
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

11/14/2012
Invoice No. 78

Fern Lake Company
Mr. Gary Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 10/31/2012.

Fees				
<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
10/17/2012	DSS	Prepare for and participate in telephone conferences with J. Golden, G. Asher and S. Gaudiano re rate adjustment strategy; conference with M. Goss re same.	0.80	\$196.00
			Billable Hours / Fees:	0.80 \$196.00

Timekeeper Summary

Timekeeper DSS worked 0.80 hours at \$245.00 per hour, totaling \$196.00.

Prior Balance:	\$0.00
Payments Received:	\$0.00
Current Fees:	\$196.00
Advanced Costs:	\$0.00
TOTAL AMOUNT DUE:	\$196.00

Goss Samford, PLLC
Suite B130
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

12/7/2012

Invoice No. 113

Fern Lake Company
Mr. Gary Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 11/30/2012.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
11/9/2012	DSS	Prepare draft Management and Services Agreement.	1.40	\$343.00
11/11/2012	MDG	Review of draft Management and Services Agreement and transmit suggested revisions to D. Samford.	0.50	\$160.00
11/12/2012	DSS	Edit and review draft Management and Services Agreement; conference with M. Goss re same; email draft to J. Golden.	1.20	\$294.00
			Billable Hours / Fees:	
			3.10	\$797.00

Timekeeper Summary

Timekeeper DSS worked 2.60 hours at \$245.00 per hour, totaling \$637.00.
Timekeeper MDG worked 0.50 hours at \$320.00 per hour, totaling \$160.00.

Payment Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>
12/4/2012	Check Number 99864	(\$196.00)
Total Payments Received:		(\$196.00)

Continued On Next Page

Client Number: 4100

Matter Number: 2000

12/7/2012

Page: 2

Prior Balance:	\$196.00
Payments Received:	(\$196.00)
Current Fees:	\$797.00
Advanced Costs:	\$0.00
TOTAL AMOUNT DUE:	<u>\$797.00</u>

Last Payment: 12/4/2012

Goss Samford, PLLC
Suite B130
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

1/3/2013
Invoice No. 143

Fern Lake Company
Mr. Garv Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 12/31/2012.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
12/13/2012	DSS	Review documents supplied by J. Golden.	0.60	\$147.00
12/17/2012	DSS	Review documents from J. Golden; telephone conference with M. Goss and J. Golden re status.	2.20	\$539.00
Billable Hours / Fees:			2.80	\$686.00

Timekeeper Summary

Timekeeper DSS worked 2.80 hours at \$245.00 per hour, totaling \$686.00.

Payment Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>
12/17/2012	Check Number 99944	(\$797.00)
Total Payments Received:		(\$797.00)

Continued On Next Page

Client Number: 4100

1/3/2013

Matter Number: 2000

Page: 2

Prior Balance:	\$797.00
Payments Received:	(\$797.00)
Current Fees:	\$686.00
Advanced Costs:	\$0.00
TOTAL AMOUNT DUE:	<u>\$686.00</u>

Last Payment: 12/17/2012

Goss Samford, PLLC
Suite B130
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

3/5/2013

Invoice No. 185

Fern Lake Company
Mr. Gary Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 2/28/2013.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
2/7/2013	DSS	Prepare for and participate in telephone conference with S. Gaudiano and J. Golden re draft Services Agreement and PSC regulatory strategy.	0.60	\$147.00
2/7/2013	MDG	Participate in telephone conference call with J. Golden and S. Gaudiano re PSC regulatory strategy and Draft Services Agreement.	0.40	\$128.00
2/13/2013	DSS	Review email from J. Golden re revisions to the Services Agreement; review PSC filing regulations; draft email to J. Golden re strategy for moving forward.	0.50	\$122.50
2/14/2013	DSS	Review message from S. Gaudiano and leave voicemail for same.	0.10	\$24.50
2/15/2013	DSS	Telephone conference with S. Gaudiano re recordkeeping for Fern Lake and discuss regulatory strategy; prepare email to J. Wuetcher (PSC) requesting a meeting and explaining the circumstances.	0.40	\$98.00
2/18/2013	DSS	Prepare and submit meeting request form to J. Wood at PSC.	0.30	\$73.50
2/20/2013	DSS	Exchange emails with J. Golden, S. Gaudiano and J. Wood re meeting at KPSC with Staff.	0.20	\$49.00
2/22/2013	DSS	Telephone conference with J. Wood re meeting on 3/7/13.	0.20	\$49.00

Continued On Next Page

Client Number: 4100
Matter Number: 2000

3/5/2013
Page: 2

Billable Hours / Fees: 2.70 \$691.50

Timekeeper Summary

Timekeeper DSS worked 2.30 hours at \$245.00 per hour, totaling \$563.50.
Timekeeper MDG worked 0.40 hours at \$320.00 per hour, totaling \$128.00.

Payment Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>
2/19/2013	Check Number 100417	(\$686.00)
Total Payments Received:		(\$686.00)

Prior Balance:	\$686.00	Last Payment: 2/19/2013
Payments Received:	(\$686.00)	
Current Fees:	\$691.50	
Advanced Costs:	\$0.00	
TOTAL AMOUNT DUE:	\$691.50	

Goss Samford, PLLC
Suite B130
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

4/5/2013

Invoice No. 242

Fern Lake Company
Mr. Garv Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 3/31/2013.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
3/6/2013	DSS	Prepare outline of topics for discussion at the meeting with PSC Staff and email same to S. Gaudiano and J. Golden; telephone conference with S. Gaudiano re meeting with PSC staff.	0.70	\$171.50
3/7/2013	DSS	Prepare for and participate in meeting at the PSC in Frankfort with G. Asher and S. Gaudiano; conference with M. Goss re same.	3.00	\$735.00
3/7/2013	MDG	Conference with D. Samford re meeting at PSC with G. Asher and S. Gaudiano.	0.50	\$160.00
3/20/2013	DSS	Exchange emails with A. Honaker preparation of ARF application to be filed with the PSC.	0.20	\$49.00
3/20/2013	LAH	Review PSC website and small utilities website for ARF information; print ARF application, checklist and attachments to use.	0.90	\$157.50
3/21/2013	LAH	Review PSC website for Fern Lake's annual report.	0.10	\$17.50
3/21/2013	LAH	Conference with D. Samford re Fern Lake ARF application.	0.20	\$35.00
3/21/2013	LAH	Review PSC website for recent ARF filings.	0.20	\$35.00
3/21/2013	LAH	Conference with D. Samford re Fern Lake annual report not yet filed.	0.10	\$17.50

Continued On Next Page

3/21/2013	DSS	Conference with A. Honaker re Fern Lake ARF application, recent ARF filings, and Fern Lake annual report.	0.50	\$122.50
3/22/2013	LAH	Begin filling in information on ARF application that we have available.	0.60	\$105.00
3/24/2013	LAH	Review recently filed ARF applications and finish draft ARF application with available information and email to D. Samford.	0.90	\$157.50
3/25/2013	LAH	Review 807 KAR 5:076; revise draft ARF application and work on requirements for notice.	1.20	\$210.00
3/25/2013	LAH	Conferences with D. Samford re Fern Lake ARF application and information still needed to complete.	0.20	\$35.00
3/25/2013	LAH	Email to D. Samford with ARF Form 1 attached and list of still needed information.	0.30	\$52.50
3/25/2013	DSS	Conference with A. Honaker re Fern Lake application and information still needed.	0.20	\$49.00
3/26/2013	DSS	Review draft application prepared by A. Honaker; send email to S. Guadiano attaching the draft application and requesting assistance in completing the remaining information necessary to make the filing.	0.60	\$147.00
3/28/2013	DSS	Telephone conference with S. Guadiano re revisions to the draft application; conference with A. Honaker re same.	0.40	\$98.00
3/28/2013	LAH	Telephone conference with D. Samford and S. Gaudiano re ARF application.	0.20	\$35.00
3/28/2013	LAH	Conference with D. Samford re Fern Lake case file and meeting at PSC.	0.10	\$17.50
3/28/2013	LAH	Review emails forwarded by D. Samford with information sent from S. Gaudiano.	0.30	\$52.50
3/28/2013	LAH	Review Fern Lake's 2012 Annual Report.	0.60	\$105.00
3/29/2013	DSS	Conference with A. Honaker re revisions to the draft ARF application.	0.20	\$49.00
3/29/2013	LAH	Review of case file and draft remainder of ARF Form 1 with information provided by S. Gaudiano.	0.70	\$122.50
3/29/2013	LAH	Draft notice to customer.	0.50	\$87.50
3/29/2013	LAH	Review 807 KAR 5:076 and notice requirements.	0.30	\$52.50
3/29/2013	LAH	Draft reasons for application attachment.	0.30	\$52.50
3/29/2013	LAH	Conference with D. Samford re ARF application.	0.20	\$35.00

Continued On Next Page

Client Number: 4100

4/5/2013

Matter Number: 2000

Page: 3

3/31/2013	LAH	Review and respond to email from D. Samford re Fern Lake ARF and Commission precedent.	0.10	\$17.50
3/31/2013	LAH	Review PSC website for Public Gas final order.	0.10	\$17.50
3/31/2013	LAH	Review Public Gas ARF final order.	0.40	\$70.00
3/31/2013	LAH	Review Fern Lake tariff.	0.50	\$87.50
3/31/2013	LAH	Review 2012 Annual Report and begin drafting Revenue Requirement Calculation attachment.	0.50	\$87.50
3/31/2013	LAH	Email to D. Samford re questions regarding proposed rates.	0.20	\$35.00

Billable Hours / Fees:	16.00	\$3,278.50
-------------------------------	--------------	-------------------

Timekeeper Summary

Timekeeper DSS worked 5.80 hours at \$245.00 per hour, totaling \$1,421.00.

Timekeeper LAH worked 9.70 hours at \$175.00 per hour, totaling \$1,697.50.

Timekeeper MDG worked 0.50 hours at \$320.00 per hour, totaling \$160.00.

Cost Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>	<u>Check No.</u>
3/7/2013	Mileage for roundtrip to Frankfort to pick up client and proceed to meeting at the PSC	\$39.20	
3/7/2013	Photocopies of Annual Report and draft Services Agreement	\$6.40	
Total Costs		\$45.60	

Payment Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>
3/18/2013	Check Number 100625	(\$691.50)
Total Payments Received:		(\$691.50)

Prior Balance:	\$691.50	Last Payment: 3/18/2013
Payments Received:	(\$691.50)	
Current Fees:	\$3,278.50	
Advanced Costs:	\$45.60	
TOTAL AMOUNT DUE:	\$3,324.10	

Goss Samford, PLLC
Suite B130
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

5/13/2013

Invoice No. 286

Fern Lake Company
Mr. Gary Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 4/30/2013.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
4/1/2013	DSS	Exchange multiple emails with A. Honaker re revenue requirement methodology and calculations; review draft of same; exchange emails re rate design issues.	0.80	\$196.00
4/1/2013	LAH	Review and respond to email from D. Samford re Fern Lake revenue requirement calculation.	0.10	\$17.50
4/1/2013	LAH	Calculate Fern Lake revenue requirement on ARF form.	0.30	\$52.50
4/1/2013	LAH	Calculate proposed rates based on information provided by S. Gaudiano calculations; calculate on flat customer charge and hybrid per 1000 gallons and customer charge.	1.00	\$175.00
4/1/2013	LAH	Review and respond to email from D. Samford re answers to ARF questions.	0.20	\$35.00
4/1/2013	LAH	Review and respond to email from D. Samford re ARF Application.	0.20	\$35.00
4/2/2013	DSS	Exchange emails with A. Honaker re rate case issues.	0.20	\$49.00
4/2/2013	LAH	Review Fern Lake information and questions to ask S. Lawless with PSC.	0.30	\$52.50
4/2/2013	LAH	Telephone conference with S. Lawless with PSC.	0.30	\$52.50
4/2/2013	LAH	Lengthy email to D. Samford re conference with S. Lawless.	0.20	\$35.00

Continued On Next Page

4/3/2013	LAH	Review and respond to email from D. Samford re Fern Lake ARF Application.	0.10	\$17.50
4/3/2013	LAH	Draft attachments for Fern Lake ARF Application.	1.00	\$175.00
4/3/2013	LAH	Lengthy email to D. Samford re Fern Lake attachments for ARF Application.	0.30	\$52.50
4/3/2013	LAH	Telephone conference with D. Samford re ARF Application.	0.10	\$17.50
4/4/2013	DSS	Review edits to the draft ARF Application and email S. Gaudiano re same.	0.60	\$147.00
4/4/2013	LAH	Review email from D. Samford to S. Gaudiano re ARF Application.	0.10	\$17.50
4/4/2013	LAH	Review and respond to email from D. Samford re ARF Application.	0.10	\$17.50
4/16/2013	LAH	Review email from D. Samford to S. Gaudiano re ARF Application review.	0.10	\$17.50
4/17/2013	LAH	Review and respond to emails from D. Samford re ARF documents.	0.20	\$35.00
4/17/2013	LAH	Review email forwarded by D. Samford from S. Gaudiano re adjusted tax year attachment.	0.20	\$35.00
4/17/2013	DSS	Exchange emails with S. Gaudiano re revised Application; telephone conference with S. Gaudiano re the Application and the schedule of adjusted operations; update A. Honaker re same; review revisions to the Schedule of Adjusted Operations from S. Gaudiano.	0.70	\$171.50
4/18/2013	DSS	Multiple conferences with A. Honaker re revisions to the Application and notice requirements.	0.30	\$73.50
4/18/2013	LAH	Revise ARF documents with additional information provided by S. Gaudiano.	0.60	\$105.00
4/18/2013	LAH	Review 807 KAR 5:076 to ensure compliance.	0.20	\$35.00
4/18/2013	LAH	Multiple conferences with D. Samford re ARF Application.	0.30	\$52.50
4/18/2013	LAH	Edit billing analysis.	0.10	\$17.50
4/19/2013	DSS	Exchange emails with A. Honaker re revisions to the ARF Application.	0.20	\$49.00
4/19/2013	LAH	Draft billing analysis, affidavit and revision to customer notice.	1.10	\$192.50
4/19/2013	LAH	Review of 807 KAR 5:076 for notice and affidavit requirements.	0.30	\$52.50

Continued On Next Page

4/19/2013	LAH	Multiple emails to D. Samford re effective date of rates and documents to review	0.30	\$52.50
4/19/2013	LAH	Review email from D. Samford re effective date and attachments.	0.10	\$17.50
4/21/2013	DSS	Review Application for rate increase and the accompanying schedules and make edits thereto.	0.50	\$122.50
4/22/2013	DSS	Conference with A. Honaker re revisions to the draft Application.	0.30	\$73.50
4/22/2013	LAH	Conference with D. Samford re changes to ARF Application.	0.20	\$35.00
4/22/2013	LAH	Revise ARF documents.	0.60	\$105.00
4/22/2013	LAH	Review ARF Order recently issued by PSC for any additional attachments needed.	0.20	\$35.00
4/22/2013	LAH	Conference with D. Samford re References page for Schedule of Adjusted Operations and strike through tariff.	0.20	\$35.00
4/22/2013	LAH	Draft Reference page for Schedule of Adjusted Operations.	0.30	\$52.50
4/22/2013	LAH	Draft strike through tariff.	0.40	\$70.00
4/22/2013	LAH	Review ARF documents for completeness.	0.30	\$52.50
4/22/2013	LAH	Email to D. Samford with revised documents attached and question with one entry on Schedule of Adjusted Operations.	0.20	\$35.00
4/23/2013	DSS	Multiple conferences with A. Honaker re draft Application; telephone conference with S. Gaudiano re same; review revised Application.	0.80	\$196.00
4/23/2013	LAH	Fill out request form for Articles of Incorporation, scan and fax to Secretary of State's Office.	0.30	\$52.50
4/23/2013	LAH	Conference with D. Samford re request for Articles of Incorporation.	0.10	\$17.50
4/23/2013	LAH	Telephone conference with D. Samford and S. Gaudiano re entry on Schedule of Adjusted Operations.	0.20	\$35.00
4/23/2013	LAH	Revise ARF documents.	0.30	\$52.50
4/23/2013	LAH	Prepare email to S. Gaudiano re steps to take to complete the Application.	0.20	\$35.00
4/23/2013	LAH	Email all documents and the steps to take to complete to D. Samford.	0.10	\$17.50
4/24/2013	DSS	Telephone conference with S. Gaudiano re changes to affidavit and notice; conference with A. Honaker re same; email revised documents to S. Gaudiano for review.	0.30	\$73.50

Continued On Next Page

4/24/2013	LAH	Telephone conference with D. Samford and S. Gaudiano.	0.10	\$17.50
4/24/2013	LAH	Review Secretary of State's website for officers' names and titles.	0.10	\$17.50
4/24/2013	LAH	Revise Affidavit and Customer Notice with different signature line.	0.10	\$17.50
4/29/2013	DSS	Conference with A. Honaker re certified copies of the Articles of Incorporation.	0.10	\$24.50
4/29/2013	LAH	Review signed Affidavit and Notice to Customers.	0.10	\$17.50
4/29/2013	LAH	Telephone call to Secretary of State's Office re Articles of Incorporation ordered and when to expect to receive them.	0.20	\$35.00
4/29/2013	LAH	Telephone calls with S. Carrico re obtaining Articles of Incorporation from Secretary of State's office.	0.10	\$17.50
4/30/2013	DSS	Conference with A. Honaker re use of 2011 tax returns with Application; telephone conference with S. Gaudiano re same; review and redact the Application for confidential information; coordinate filing with A. Honaker and S. Carrico.	0.80	\$196.00
4/30/2013	LAH	Prepare ARF documents for filing.	0.50	\$87.50
4/30/2013	LAH	Email to S. Gaudiano re copy of 2012 tax returns.	0.10	\$17.50
4/30/2013	LAH	Conference with D. Samford re filing deadline for rates to be effective 6/1/13.	0.10	\$17.50
4/30/2013	LAH	Multiple conferences with D. Samford re 2012 tax returns, signing documents and filing questions.	0.30	\$52.50
4/30/2013	LAH	Telephone conference with S. Gaudiano and D. Samford re 2012 tax returns.	0.10	\$17.50
4/30/2013	LAH	Prepare ARF Application for filing at PSC, print, copy, and redact tax returns, mail and email to Attorney General and draft cover letter.	2.10	\$367.50
4/30/2013	SAC	Travel to Frankfort to file ARF Application.	0.50	\$20.00

Billable Hours / Fees: 21.40 \$4,069.50

Timekeeper Summary

Timekeeper DSS worked 5.60 hours at \$245.00 per hour, totaling \$1,372.00.
Timekeeper LAH worked 15.30 hours at \$175.00 per hour, totaling \$2,677.50.
Timekeeper SAC worked 0.50 hours at \$40.00 per hour, totaling \$20.00.

Client Number: 4100
Matter Number: 2000

5/13/2013
Page: 5

Cost Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>	<u>Check No.</u>
4/29/2013	Certified Copies of Articles of Incorporation and Amendments at Secretary of State	\$12.50	
4/30/2013	Mileage to Frankfort (one way) to file ARF Application	\$13.44	
4/30/2013	Photocopies of ARF Application	\$43.30	
	Total Costs	\$69.24	

Prior Balance:	\$3,324.10
Payments Received:	\$0.00
Current Fees:	\$4,069.50
Advanced Costs:	\$69.24
TOTAL AMOUNT DUE:	\$7,462.84

Goss Samford, PLLC
Suite B-325
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

6/11/2013

Invoice No. 331

Fern Lake Company
Mr. Gary Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 5/31/2013.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
5/2/2013	LAH	Review email to S. Gaudiano from D. Samford with ARF application attached.	0.10	\$17.50
5/2/2013	LAH	Review letter from PSC acknowledging receipt of filing.	0.10	\$17.50
5/2/2013	LAH	Review email from D. Samford re Attorney General's questions.	0.20	\$35.00
5/4/2013	DSS	Respond to email from D. Spenard (AG); email S. Gaudiano for answers to questions posed by D. Spenard.	0.20	\$49.00
5/4/2013	LAH	Review emails from D. Samford to D. Spenard re AG questions and email to S. Gaudiano.	0.20	\$35.00
5/6/2013	DSS	Review email from D. Spenard re responses to informal data requests; exchange emails with S. Gaudiano and A. Honaker re response to same; edit draft response to D. Spenard.	0.70	\$171.50
5/6/2013	LAH	Reply to D. Samford's email re draft letter to D. Spenard and telephone conference with D. Samford.	0.20	\$35.00
5/6/2013	LAH	Research re OAG's inquiry relating to the Safe Drinking Water Act and consumer confidence reports; email research to D. Samford.	0.70	\$122.50
5/6/2013	LAH	Draft letter to D. Spenard to answer questions.	0.80	\$140.00
5/6/2013	LAH	Email D. Samford draft letter to D. Spenard.	0.10	\$17.50

Continued On Next Page

5/6/2013	LAH	Review D. Samford's revision to letter to D. Spenard; edit and forward letter to D. Samford.	0.80	\$140.00
5/7/2013	DSS	Conference with A. Honaker re response to Attorney General's request and review email to S. Gaudiano re same.	0.10	\$24.50
5/7/2013	LAH	Email to S. Gaudiano re D. Spenard letter.	0.10	\$17.50
5/8/2013	DSS	Exchange emails with A. Honaker re response to D. Spenard (AG).	0.30	\$73.50
5/8/2013	LAH	Emails to and from S. Gaudiano re letter to D. Spenard and emails to D. Samford.	0.30	\$52.50
5/9/2013	DSS	Review deficiency review letter from L. Faulkner (PSC) and email update to S. Gaudiano.	0.10	\$24.50
5/9/2013	LAH	Conference with D. Samford re changing signature line of letter, printing, emailing and mailing letter to D. Spenard and copy by email to S. Gaudiano.	0.30	\$52.50
5/9/2013	LAH	Review email from D. Samford to S. Gaudiano re no deficiencies found in initial PSC review.	0.10	\$17.50
5/13/2013	DSS	Review emails from D. Spenard and A. Honaker.	0.10	\$24.50
5/13/2013	LAH	Review and respond to emails from D. Spenard re 2012 Annual Report.	0.10	\$17.50
5/15/2013	DSS	Review emails between A. Honaker and D. Spenard re the 2012 annual report; conference with A. Honaker re same.	0.10	\$24.50
5/15/2013	LAH	Scan and email 2012 Annual Report to D. Spenard.	0.20	\$35.00
5/21/2013	DSS	Review Motion for Leave to Intervene from Water Service Corporation of Kentucky; conference with A. Honaker re same; forward motion to S. Gaudiano.	0.20	\$49.00
5/21/2013	LAH	Review email from D. Samford to S. Gaudiano re Motion to Intervene and review the motion.	0.20	\$35.00
5/30/2013	DSS	Review PSC Order and calendar dates; conference with A. Honaker re same; email a copy of the PSC's Order to S. Gaudiano.	0.30	\$73.50
5/30/2013	LAH	Review email from D. Samford with procedural order attached; review procedural order and calendar dates.	0.40	\$70.00

Billable Hours / Fees: 7.00 \$1,372.00

Client Number: 4100
Matter Number: 2000

6/11/2013
Page: 3

Timekeeper Summary

Timekeeper DSS worked 2.10 hours at \$245.00 per hour, totaling \$514.50.
Timekeeper LAH worked 4.90 hours at \$175.00 per hour, totaling \$857.50.

Prior Balance:	\$7,462.84
Payments Received:	\$0.00
Current Fees:	\$1,372.00
Advanced Costs:	\$0.00
TOTAL AMOUNT DUE:	<u>\$8,834.84</u>

Goss Samford, PLLC
Suite B-325
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

7/8/2013

Invoice No. 378

Fern Lake Company
Mr. Gary Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 6/30/2013.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
6/11/2013	DSS	Review Order from the PSC and conference with A. Honaker re procedural status.	0.20	\$49.00
6/11/2013	LAH	Scan and send pdf version of PSC Order granting intervention to customer in ARF case to S. Gaudiano.	0.20	\$35.00
6/26/2013	DSS	Review AG's Motion for Leave to Intervene; review and respond to email from A. Raser (PSC) re scheduling of field review and data requests; telephone conference with S. Gaudiano re same; exchange emails with A. Honaker re case status.	0.60	\$147.00
6/26/2013	LAH	Review emails from D. Samford re AG intervention and staff's questions.	0.30	\$52.50
6/27/2013	DSS	Review and respond to email from A. Raser re deadline for tendering responses to data requests; exchange emails with A. Honaker and S. Gaudiano re same.	0.20	\$49.00
6/27/2013	LAH	Review email forwarded by D. Samford with PSC information; telephone conference with D. Samford and S. Gaudiano.	0.30	\$52.50
Billable Hours / Fees:			1.80	\$385.00

Continued On Next Page

Timekeeper Summary

Timekeeper DSS worked 1.00 hours at \$245.00 per hour, totaling \$245.00.
Timekeeper LAH worked 0.80 hours at \$175.00 per hour, totaling \$140.00.

Payment Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>
7/3/2013	Check Number 1094	(\$1,372.00)
7/3/2013	Check Number 1094	(\$4,069.50)
7/3/2013	Check Number 1094	(\$12.50)
7/3/2013	Check Number 1094	(\$56.74)
7/3/2013	Check Number 1094	(\$3,278.50)
7/3/2013	Check Number 1094	(\$45.60)
Total Payments Received:		(\$8,834.84)

Prior Balance:	\$8,834.84	Last Payment: 7/3/2013
Payments Received:	(\$8,834.84)	
Current Fees:	\$385.00	
Advanced Costs:	\$0.00	
TOTAL AMOUNT DUE:	\$385.00	

Goss Samford, PLLC
Suite B-325
2365 Harrodsburg Road
Lexington, KY 40504
Telephone: 859-368-7740

8/7/2013

Invoice No. 427

Fern Lake Company
Mr. Gary Asher
c/o Appolo Fuels, Inc.
P. O. Box 1727
Middlesboro, KY 40965

Client Number: 4100 Fern Lake Company
Matter Number: 2000 Fern Lake - 2012 Rate Adjustment
For Services Rendered Through 7/31/2013.

Fees

<u>Date</u>	<u>Timekeeper</u>	<u>Description</u>	<u>Hours</u>	<u>Amount</u>
7/3/2013	DSS	Exchange emails with A. Honaker re status of the Responses to PSC Data Requests.	0.10	\$24.50
7/3/2013	LAH	Emails to and from S. Carrico re verification format; email to D. Samford re data responses; review D. Samford's response, and draft verification sheet; email to S. Gaudiano and D. Samford re responses; email and texts to D. Samford re verification; draft cover letter for filing; review case file to see if responses need to be served on Intervenors; emails to and from D. Samford re service.	3.20	\$560.00
7/5/2013	LAH	Emails to and from S. Carrico re Fern Lake documents received; review Fern Lake documents sent by S. Carrico; emails to and from S. Gaudiano re confidential information; emails to and from A. Ramser at PSC re filing extension for Data Request Responses.	1.60	\$280.00
7/8/2013	MDG	Conference with A. Honaker; review of draft Data Request Responses for filing at KPSC.	0.80	\$256.00
7/8/2013	DSS	Review email and attachment from A. Honaker re draft Responses to Data Requests.	0.20	\$49.00
7/8/2013	LAH	Finish drafting Responses to Data Requests and email to S. Gaudiano re questions on responses.	0.90	\$157.50

Continued On Next Page

7/8/2013	LAH	Telephone conferences with S. Gaudiano; revise responses and email to S. Gaudiano; prepare responses to file at PSC (printing, copying, signing, redacting and organizing); conference with M. Goss re his review of responses before filing.	1.80	\$315.00
7/9/2013	SAC	Travel to and from Frankfort (PSC) to file Responses to Data Requests.	1.00	\$40.00
7/9/2013	DSS	Review letter from A. Ramser re filing of correspondence in the case record.	0.10	\$24.50
7/9/2013	LAH	Review letter received from PSC re emails filed in record; conference with S. Carrico re filing responses at PSC; email file-stamped copy of responses to S. Gaudiano and D. Samford.	0.40	\$70.00
7/12/2013	LAH	Review Fern Lake Order amending procedural schedule issued by PSC.	0.20	\$35.00
7/15/2013	DSS	Review Responses to Data Requests; review Amended Procedural Schedule and calendar dates; conference with A. Honaker re notice requirements; email S. Gaudiano re participation in the informal conference.	0.80	\$196.00
7/15/2013	LAH	Send Amended Procedural Schedule to S. Gaudiano and D. Samford; conference with D. Samford.	0.20	\$35.00
7/15/2013	LAH	Conference with D. Samford re data requests that were filed and new deadlines due to amended procedural schedule.	0.20	\$35.00
7/16/2013	DSS	Review email from A. Honaker re hearing notice deadline.	0.10	\$24.50
7/16/2013	LAH	Review notice of hearing requirements; email requirements to D. Samford; calendar dates from procedural schedule.	0.30	\$52.50
7/30/2013	DSS	Review the KPSC Staff Report; exchange emails with A. Honaker re same; conference with M. Goss re strategy; send draft report to S. Gaudiano for review and exchange emails re same.	1.30	\$318.50
7/30/2013	LAH	Review and respond to email from D. Samford re PSC staff report issued; conference with D. Samford re PSC staff report; review PSC staff report.	1.30	\$227.50
7/30/2013	MDG	Conference with D. Samford re strategy.	0.40	\$128.00
7/31/2013	DSS	Conference with M. Goss and A. Honaker re the Staff Report and preparation of a response; telephone conference with S. Gaudiano re same.	0.50	\$122.50

Continued On Next Page

7/31/2013	LAH	Conference with D. Samford re Fern Lake report; telephone conference with S. Gaudiano and D. Samford re PSC staff report; research recent responses to PSC staff reports in other ARF cases; research cost allocation issue.	1.80	\$315.00
7/31/2013	MDG	Conference with D. Samford and A. Honaker re Staff Report and the preparation of a response to same.	0.20	\$64.00

Billable Hours / Fees:	17.40	\$3,330.00
-------------------------------	--------------	-------------------

Timekeeper Summary

Timekeeper DSS worked 3.10 hours at \$245.00 per hour, totaling \$759.50.
 Timekeeper LAH worked 11.90 hours at \$175.00 per hour, totaling \$2,082.50.
 Timekeeper MDG worked 1.40 hours at \$320.00 per hour, totaling \$448.00.
 Timekeeper SAC worked 1.00 hours at \$40.00 per hour, totaling \$40.00.

Cost Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>	<u>Check No.</u>
7/8/2013	Photocopies of Exhibits to Responses to Data Requests	\$5.50	
7/8/2013	Photocopies of Responses to Data Requests and Exhibits	\$41.20	
7/9/2013	Mileage to and from Frankfort (PSC) to file Responses to Data Requests	\$26.88	
7/9/2013	Postage for Responses to Data Requests	\$3.84	
Total Costs		\$77.42	

Payment Detail

<u>Date</u>	<u>Description</u>	<u>Amount</u>
7/15/2013	Check Number 1100	(\$385.00)
Total Payments Received:		(\$385.00)

Prior Balance:	\$385.00	Last Payment: 7/15/2013
Payments Received:	(\$385.00)	
Current Fees:	\$3,330.00	
Advanced Costs:	\$77.42	
TOTAL AMOUNT DUE:	\$3,407.42	

Void <input type="checkbox"/>		a Employee's social security number [REDACTED]		OMB No. 1545-0008			
b Employer identification number (EIN) [REDACTED]			1 Wages, tips, other compensation 34734.00		2 Federal income tax withheld 2536.54		
c Employer's name, address, and ZIP code APPOLO FUELS P O BOX 1727 MIDDLESBORO KY 40965			3 Social security wages 34734.00		4 Social security tax withheld 1458.83		
			5 Medicare wages and tips 34734.00		6 Medicare tax withheld 503.64		
			7 Social security tips		8 Allocated tips		
d Control number 39			9		10 Dependent care benefits		
e Employee's first name and initial Last name Suff. SHELLY A. LEWIS			11 Nonqualified plans		12a See instructions for box 12		
			13 Statutory employee Retirement plan Third-party sick pay <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		12b		
			14 Other INS 366.00		12c		
					12d		
f Employee's address and ZIP code							
15 State Employer's state ID number KY [REDACTED]		16 State wages, tips, etc. 34734.00		17 State income tax 1645.83		18 Local wages, tips, etc.	
						19 Local income tax	
						20 Locality name	

Form **W-2** Wage and Tax Statement
Copy D—For Employer.
DAA

2012

Department of the Treasury—Internal Revenue Service
For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

Void <input type="checkbox"/>		a Employee's social security number [REDACTED]		OMB No. 1545-0008			
b Employer identification number (EIN) [REDACTED]			1 Wages, tips, other compensation 52260.00		2 Federal income tax withheld 5753.80		
c Employer's name, address, and ZIP code APPOLO FUELS P O BOX 1727 MIDDLESBORO KY 40965			3 Social security wages 52260.00		4 Social security tax withheld 2194.92		
			5 Medicare wages and tips 52260.00		6 Medicare tax withheld 757.77		
			7 Social security tips		8 Allocated tips		
d Control number 40			9		10 Dependent care benefits		
e Employee's first name and initial Last name Suff. THOMAS W. LEWIS			11 Nonqualified plans		12a See instructions for box 12		
			13 Statutory employee Retirement plan Third-party sick pay <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		12b		
			14 Other		12c		
					12d		
f Employee's address and ZIP code							
15 State Employer's state ID number KY [REDACTED]		16 State wages, tips, etc. 52260.00		17 State income tax 2714.40		18 Local wages, tips, etc.	
						19 Local income tax	
						20 Locality name	

Form **W-2** Wage and Tax Statement
Copy D—For Employer.
DAA

2012

Department of the Treasury—Internal Revenue Service
For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

Void <input type="checkbox"/>		a Employee's social security number [REDACTED]		OMB No. 1545-0008			
b Employer identification number (EIN) [REDACTED]			1 Wages, tips, other compensation 6115.00		2 Federal income tax withheld 544.96		
c Employer's name, address, and ZIP code APPOLO FUELS P O BOX 1727 MIDDLESBORO KY 40965			3 Social security wages 6115.00		4 Social security tax withheld 256.83		
			5 Medicare wages and tips 6115.00		6 Medicare tax withheld 88.67		
			7 Social security tips		8 Allocated tips		
d Control number 38			9		10 Dependent care benefits		
e Employee's first name and initial Last name Suff. JOSHUA W. LEWIS			11 Nonqualified plans		12a See instructions for box 12		
			13 Statutory employee Retirement plan Third-party sick pay <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		12b		
			14 Other		12c		
					12d		
f Employee's address and ZIP code							
15 State	Employer's state ID number	16 State wages, tips, etc.	17 State income tax	18 Local wages, tips, etc.	19 Local income tax	20 Locality name	
KY	[REDACTED]	6115.00	185.32				

Form **W-2** Wage and Tax Statement
 Copy D—For Employer.
 DAA

2012

Department of the Treasury—Internal Revenue Service
 For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.