

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
JACKSON ENVIRONMENTAL FIELD OFFICE  
1625 HOLLYWOOD DRIVE  
JACKSON, TENNESSEE 38305-4316  
PHONE (731) 512-1300 STATEWIDE 1-888-891-8332 FAX (731) 661-6283

CERTIFIED MAIL  
7009 0960 0000 8404 8649

April 29, 2010

Mr. Larry Jordan, Property Manager  
Crye-Leike Property Management  
890 Willow Tree Circle #1  
Cordova, Tennessee 38018

RE: **NOTICE OF NON-COMPLIANCE WITH THE SAFE DAMS ACT**  
**Carrollwood Lake A-C Dam**  
I.D. # 79-7085  
Shelby County

Dear Mr. Jordan:

Under the provisions of the Safe Dams Act, TCA 69-11-101 et. seq. a safety inspection of the above referenced dam was conducted by this Division on April 26, 2010. Our field inspection report detailing the observations made during our inspection is attached. Based on the deficiencies found during this inspection, a Certificate of Approval and Safety cannot be issued at this time. A list of items is given below which must be accomplished to comply with the Safe Dams Act.

**The following action is required within thirty days:**

- 1) **Hire a professional engineer as soon as possible to evaluate the stability/piping problem present beneath the concrete spillway. Have him notify us by letter that he has been retained to evaluate, take corrective action, and to document and oversee the necessary repairs.**
- 2) **Mow the embankment and remove/control any woody growth on the u/s slope of the dam and within ten feet of the concrete spillway channel to allow these areas to be closely monitored.**

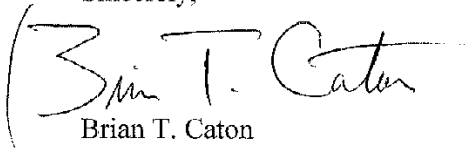
**You will remain in violation and are subject to fines and penalties until you correct all deficiencies and are issued a Certificate of Approval and Safety.**

Mr. Larry Jordan  
April 29, 2010  
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**Normal routine maintenance should continue to include cleaning  
and sealing any cracks or damaged areas on the concrete spillway.**

If you have any questions concerning this letter, you may contact Dan Hatch at (731) 512-1354 or  
me at (731) 512-1355.

Sincerely,

A handwritten signature in black ink that reads "Brian T. Caton". The signature is written in a cursive style with a large, stylized "B" at the beginning.

Brian T. Caton  
Manager  
Division of Water Supply

c: DWS - Safe Dams  
DWS - Enforcement Section



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION**

Environmental Field Office  
1625 Hollywood Drive  
Jackson, Tennessee 38305-4316  
Phone (731) 512-1300 Fax (731) 661-6283

**INSPECTION REPORT  
DAM AND APPURTENANT WORKS**

Name of Structure Carrollwood Lake 'A-C' Dam I.D. 79-7085

Owner Carrollwood Lakes Homeowners Assn. County Shelby

H.P.C. 2 Weather Cloudy, 60<sup>o</sup>S Date April 26, 2010

Last Inspection Date April 7, 2008 Lake Level 2" > NPL

Emergency Spillway Capacity: Required 1/3 PMP Existing 1/3 PMP

Persons Present at Inspection Dan Hatch and Harold Wilhite - Safe Dams

Any structural modifications, problem areas, or additional information should be sketched. If additional sheets are needed for further sketches or notes, these should also be noted and made a part of this report.

1. UPSTREAM (LAKESIDE) SLOPE OF DAM

A. Vegetative Cover Tall grass, scattered bushes and small trees

|                     | Yes      | No            |
|---------------------|----------|---------------|
| Trees               | <u>X</u> | <u>      </u> |
| Brush and/or Briers | <u>X</u> | <u>      </u> |
| Needs Mowing        | <u>X</u> | <u>      </u> |

B. Erosion None active. The area closest to spillway has riprap  
on it to stop/control erosion.

C. Slope Protection Riprap along the waterline on the old eroded  
areas.

|                       |              |                |
|-----------------------|--------------|----------------|
| Completely riprapped? | Yes<br>_____ | No<br><u>X</u> |
|-----------------------|--------------|----------------|

Areas needing additional riprap None at present.

D. Slumps, Slides, Cracks None observed.

|                              |              |                |
|------------------------------|--------------|----------------|
| Sketch of location attached? | Yes<br>_____ | No<br><u>X</u> |
|------------------------------|--------------|----------------|

E. Animal Burrows None observed.

F. Drift and Debris Not significant

|                                     |              |                |
|-------------------------------------|--------------|----------------|
| Blocking trash rack or riser inlet? | Yes<br>_____ | No<br><u>X</u> |
|-------------------------------------|--------------|----------------|

G. Remarks Cut/remove and control all woody growth and mow the  
u/s slope regularly.

2. CREST (TOP OF DAM)

A. Vegetative Cover Tall grass

|                                   | Yes      | No       |
|-----------------------------------|----------|----------|
| Trees                             | _____    | <u>X</u> |
| Brush and/or briers               | _____    | <u>X</u> |
| Needs mowing                      | <u>X</u> | _____    |
| Ruts from vehicle or foot traffic | _____    | <u>X</u> |

B. Erosion No active erosion observed.

C. Slumps, Slides, Cracks None observed.

|                              | Yes   | No       |
|------------------------------|-------|----------|
| Sketch of location attached? | _____ | <u>X</u> |

D. Remarks Continue routine maintenance.

3. DOWNSTREAM SLOPE OF DAM

A. Vegetative Cover Tall grass

|                              | Yes      | No       |
|------------------------------|----------|----------|
| Trees                        | _____    | <u>X</u> |
| Brush and/or briers          | _____    | <u>X</u> |
| Needs mowing and/or clearing | <u>X</u> | _____    |
| Needs reseeding              | _____    | <u>X</u> |

B. Erosion None observed.

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C. Seepage Water appears to be leaking ~40gpm beneath the concrete spillway. This leakage is removing soil with it. The major leak is on the right side of the rip-rapped outlet.

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|   | Yes   | No    |
|---|-------|-------|
| Left Abutment (Looking Downstream)                | _____ | X     |
| Right Abutment (Looking Downstream)               | _____ | X     |
| Toe of Dam  | _____ | X     |
| Sketch of location attached                       | _____ | X     |
| Soil particles or discolored water in the seepage | X     | _____ |

ESTIMATED VOLUME OF SEEPAGE ~40gpm

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D. Slumps, Slides, Cracks None observed.

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|                              | Yes   | No |
|------------------------------|-------|----|
| Sketch of location attached? | _____ | X  |

E. Animal Burrows None observed.

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|                             | Yes   | N/A | No    |
|-----------------------------|-------|-----|-------|
| Water coming from hole?     | _____ | X   | _____ |
| Running water sounds heard? | _____ | X   | _____ |

F. Remarks Hire a qualified engineer to evaluate the situation as soon as possible. Uncontrolled seepage/piping beneath the concrete chute spillway may cause a failure.

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4. PRINCIPAL SPILLWAY

A. Inlet

- 1. Type (concrete, metal, etc.) 65' concrete apron on the left abutment.
- 2. Shape \_\_\_\_\_
- 3. Condition Under water today

B. Outlet

- 1. Type (concrete, metal, etc.) Converging concrete apron with riprapped stilling basin.
- 2. Shape \_\_\_\_\_
- 3. Condition deficient due to uncontrolled seepage and several bushes/trees are present within 10 feet of the apron.

|                              |                 |             |
|------------------------------|-----------------|-------------|
| Is stilling basin riprapped? | Yes<br><u>X</u> | No<br>_____ |
|------------------------------|-----------------|-------------|

- C. Remarks Stop the leakage and stabilize the spillway foundation.  
Cut/remove any woody vegetation within 10 feet of the concrete.  
Rework and seal any cracks in the concrete as necessary.

5. EMERGENCY SPILLWAY

- A. Type (rock, earthen, etc.) Combined with the principal spillway.
- B. Condition Same

|                                    |       |          |
|------------------------------------|-------|----------|
| Inlet blocked by debris?           | Yes   | No       |
|                                    | _____ | <u>X</u> |
| Trees or brush growing in channel? | _____ | <u>X</u> |

C. Remarks Clean and repair any cracks occurring in the concrete surface as necessary.

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6. DRAWDOWN FACILITIES 12" ductile iron pipe with control valve  
located on the right side of the crest of the spillway.

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When is last known time operated 2002

Valved on upstream or downstream side? Dam crest (manhole)

Remarks None

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7. DOWNSTREAM HAZARD POTENTIAL 2 - Significant

|  |       |          |
|--|-------|----------|
| Is a change in hazard classification needed? | Yes   | No       |
|  | _____ | <u>X</u> |

If Yes, explain why \_\_\_\_\_

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|                                       |          |       |
|---------------------------------------|----------|-------|
| 8. DO PLANS AND SPECIFICATIONS EXIST? | Yes      | No    |
|                                       | <u>X</u> | _____ |

If so, where? DWS

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|                          |       |          |
|--------------------------|-------|----------|
| 9. DO PIEZOMETERS EXIST? | Yes   | No       |
|                          | _____ | <u>X</u> |

If so, how many are present? \_\_\_\_\_

Remarks \_\_\_\_\_

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10. GENERAL COMMENTS      This structure is presently deficient due to a major stability/piping problem and for failure to provide adequate routine maintenance/control inappropriate vegetation.

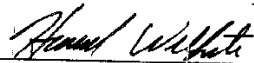
11. RECOMMENDATIONS

Hire a professional engineer as soon as possible to evaluate the stability/piping problem present beneath the concrete spillway. Have him notify us by letter within thirty days that he has been retained to evaluate, take corrective action, and to document and oversee and the necessary repairs.

Mow the embankment and remove/control any woody growth on the u/s slope of the dam and within ten feet of the concrete spillway channel to allow these areas to be closely monitored.

Continue routine maintenance and clean and seal any cracks/damage on the concrete spillway.

INSPECTOR'S SIGNATURE



Harold Wilhite

INSPECTION REPORT SUMMARY

DAM NAME Carrollwood Lake 'A-C' I.D. NUMBER 79-7085

INSPECTION DATE April 26, 2010

The checklist below is marked to indicate the conclusions in the report.

**GENERAL CONDITIONS**

|  | Satisfactory                        | Marginal                            | Deficient                           |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| <u>UPSTREAM SLOPE</u>                    |                                     |                                     |                                     |
| Vegetative Cover                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mowed Adequately                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Erosion                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Slope Protection                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Slumps, Slides, Burrows                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <u>CREST OF DAM</u>                      |                                     |                                     |                                     |
| Vegetative Cover                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mowed Adequately                         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Erosion                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Ruts, Cracks, Holes                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <u>DOWNSTREAM SLOPE</u>                  |                                     |                                     |                                     |
| Vegetative Cover                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mowed Adequately                         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Erosion                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Seepage                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Slumps, Slides, Burrows, Holes           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <u>SPILLWAYS AND DRAWDOWN FACILITIES</u> |                                     |                                     |                                     |
| Spillway Capacity                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Principal Spillway Condition             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Emergency Spillway Condition             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Drawdown Operable                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |