



# Ohio Department of Natural Resources

TED STRICKLAND, GOVERNOR

SEAN D. LOGAN, DIRECTOR

David Hanselmann • Chief

## Division of Soil & Water Resources

October 14, 2009

Mr. Steve Mullins  
The Landings Property Owners Association, Inc.  
11301 Upper Gilchrist Road  
Mt. Vernon, Ohio 43050

Crown Hill Condominiums  
Nelson & Nelson CPA's, Inc. (Statutory Agent)  
1684 Venture Drive, Suite B  
Mt. Vernon, Ohio 43050

Mr. Stephen P. Upham III & Stephanie J. Lord  
41 Mallard Pointe  
Mt. Vernon, Ohio 43050

Mr. John Michael & Mary Ann Haughton  
39 Mallard Pointe  
Mt. Vernon, Ohio 43050

Mr. Wayne E. & Virginia L Dunlop  
37 Mallard Pointe  
Mt. Vernon, Ohio 43050

Mr. Floyd E. & Carolyn Matthews  
35 Mallard Pointe  
Mt. Vernon, Ohio 43050

Mr. Bruce E. & Peggy L. Oldham  
33 Mallard Pointe  
Mt. Vernon, Ohio 43050

William & Barbara Hatfield  
Trustees of Hatfield Trust  
31 Mallard Pointe  
Mt. Vernon, Ohio 43050

RE: Knox Cattle Company Dam  
Knox County  
File Number: 0323-003

Dear Dam Owners:

The Division of Soil & Water Resources, Dam Safety Engineering Program, has responsibility to ensure that human life, health, and property are protected from dam failures. Reviewing the development downstream of dams and performing periodic inspections are important tasks for achieving dam safety. The Division of Soil & Water Resources investigated the development downstream of the Knox Cattle Company Dam using aerial photography. The dam is shown on Figure 1, which has been attached. It was found that significant development had taken place immediately downstream of the dam. Division engineers visited the dam during the spring of 2008 and evaluated its classification according to the mandates of Ohio Administrative Code (OAC) Rule 1501:21-13-01 (see enclosed Site Visit Memorandum). Based on aerial photography and field observations, the classification of the Knox Cattle Company Dam has been changed from Class II to Class I due to the potential downstream hazard of the dam. Failure of the Knox Cattle Company Dam will likely cause structural damage to downstream residential and commercial developments. In accordance with OAC Rule 1501:21-13-02, the design flood for a Class I dam is 100 percent of the Probable Maximum Flood or the critical flood. The inventory records for this dam have been revised based on the information obtained from this inspection.

The Division of Soil & Water Resources' files had indicated that Knox Cattle Company was the owner of the dam. Based on information gained from the Knox County Auditor's web site, Knox Cattle Company no longer owns the dam, and the persons and entities listed above are the owners of the dam (see Figure 1). Under Ohio's dam safety regulations, "owners" are "those who own, or propose to construct a dam or levee." OAC Rule 1501:21-3-01(V). A "dam" is defined as "any artificial barrier together with any appurtenant works, which either does or may

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impound water or other liquefied material ..." OAC Rule 1501:21-3-01(F). "Appurtenant works" include, but are not limited to, spillways and other drains that are integral to the performance of the structure. If you believe that you are not an owner of the Knox Cattle Company dam or believe that there are additional owners of the dam not addressed in this communication, please contact Jim Huitger at 614/265-6736.

The Knox Cattle Company Dam currently does not meet required dam safety standards. The owners must address the following items within five years from the date of this letter:

1. Perform a hydrologic and hydraulic study to determine the adequacy of the dam's discharge/storage capacity to safely pass the required design flood. Prepare plans and specifications as necessary to increase the discharge/storage capacity to pass the required design flood. (This item requires the services of a registered professional engineer.)
2. Prepare an operation, maintenance, and inspection manual and an emergency action plan (EAP) including an inundation map. Guidelines for the preparation of these documents are included with this letter. A registered professional engineer must prepare the inundation map and Section IV (Emergency Detection, Evaluation, and Classification) of the EAP. It is recommended that your engineer contact the Division of Soil & Water Resources prior to undertaking the engineering study for the inundation map.
3. Provide a device or plan to permit draining of the lake within a reasonable period of time in accordance with OAC Rule 1501:21-13-06 (in case of emergency). Contact the Division of Soil & Water Resources for further discussion.

Please note that additional responsibilities of dam owners can be found in the Ohio Revised Code (ORC) and OAC. Links to the ORC and OAC are available on the division's web site (<http://www.dnr.state.oh.us/tabid/3329/Default.aspx>) and hard copies are available by request.

We look forward to working with you to improve the safety of this dam and your cooperation is appreciated. Please contact Jim Huitger at 614/265-6736 if you have any questions.

Sincerely,



David Hanselmann  
Chief  
Division of Soil and Water Resources

DH:krb

cc: Jim Huitger, ODNR, Dam Safety Engineering Program

Enclosures



## SITE VISIT MEMORANDUM

**File Number:** 0323-003 **Date/Time of Visit:** April 30, 2008; 10:30 AM  
**Project Name:** Knox Cattle Company Dam **County:** Knox  
**Site Conditions:** 65° F, Sunny,  
Dry Ground Surface  
**Inspectors:** Peter George, P.E. P.C.,  
Jeremy Wenner, E.I.

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A site visit was made to Knox Cattle Company Dam to investigate potential downstream hazard.

**Observations:** The current spillway configuration of this dam does not appear to match inventory information. The principal spillway discharge system appears to consist of a trapezoidal concrete weir located in the left groin. Dimensions appeared as followed (estimated): 11-foot top width, 6-foot bottom width, 3-foot vertical distance between top and bottom. Below the weir, the channel had been lined with riprap. Currently, the system appeared in stable condition; however the system did appear to be poorly configured for safe operation during high flows. Additionally, owner information has most likely changed. These items will require follow-up.

Many houses were located directly downstream of the structure. Houses were located between 5-10 feet vertically and 15-100 feet horizontally from the channel approximately 0-500 feet downstream of the toe of the dam. Beyond this distance several businesses were noted. See the aerial photo and noted structures attached to this memo for more information.

**Discussion:** It appears that this structure should be reclassified to Class I based upon potential downstream hazard. Final decisions regarding classification will be made at a later date.