

New York State Department of Environmental Conservation

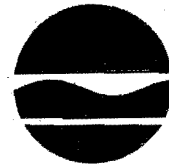
Division of Water

Bureau of Flood Protection & Dam Safety, 4th Floor

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Alexander B. Grannis
Commissioner

August 18, 2010

Roland Ozols
New York State Department of Environmental Conservation
Division of Operations
625 Broadway
Albany, New York 12233

Re: Kingdom Dam
DEC ID#: 220-0594
Elizabethtown (T), Essex County

Dear Mr. Ozols:

I conducted a routine inspection of the Kingdom Dam on August 3, 2010 as part of the Department of Environmental Conservation's (Department) ongoing Dam Safety Program. A copy of the inspection report is enclosed for your reference. Highlights of the inspection consisted of the following:

1. There is seepage at the left and right downstream toe areas of the dam. Seepage was observed in a few areas, however due to the overgrown vegetation across the downstream toe, it is difficult to identify where the seepage originates. There is a steady flow along the left toe with hydrophilic vegetation growing left of the service spillway. The seepage along the right toe appears to pool right of the outlet structure and exits at the right side of the low level plunge pool. The toe area should be cleared of vegetation (15 to 20 foot distance from toe) to provide for proper inspection and monitoring. You should monitor the seepage during your routine inspections to identify if there are any changes in the seepage (flow, turbidity).
2. The downstream face of the dam, buttresses and spillway have progressive concrete deterioration, with cracking, spalls and efflorescence. Also vegetation is growing in several joints and deteriorated areas. The concrete deterioration should be monitored during your routine inspections to identify areas of change, leakage or other potential developing concerns, until remedial measures are performed.

In addition to the observed deficiencies, the most recent engineering assessment report on the dam identifies that the dam does not meet structural stability criteria. Recent correspondence indicates the next step in the rehabilitation project is development of the plans and specifications.

Please provide a schedule identifying the key milestones in the proposed rehabilitation project. Include items such as authorization to begin design, the application submittal date, and construction start and end dates. Also, please provide the current status of the plans, specifications and engineering report that will accompany the Dam Safety application.

The revisions to the Dam Safety Regulations, which became effective August 19, 2009, can be reviewed at the following website: <http://www.dec.ny.gov/regs/4598.html>. Under the Dam Safety Regulations, owners of Class B - Intermediate Hazard dams, are required to:

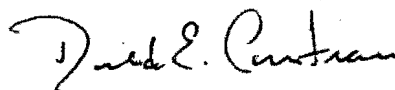
1. Operate and maintain the dam in a safe condition at all times;
2. Maintain in good order all available records for the dam, and provide those records to any new owner;
3. Submit an Annual Certification to the Department by January 31, annually, beginning in 2010;
4. Have an EAP prepared and submit the plan to the Department by August 19, 2011;
5. Develop and implement an Inspection and Maintenance (I&M) Plan by August 19, 2010. (Do not submit the I&M Plan to the Department unless requested);
6. Have an Engineering Assessment (EA) conducted by a Professional Engineer and submit the report to the Department. The initial EA for a Class B Dam is due by August 19, 2015. EAs are required every 10 years, following the initial report;
7. Report flows in an erodible auxiliary spillway within 5 days of activation of the spillway;
8. Have a Safety Inspection conducted by a Professional Engineer on a regular schedule as defined in your I&M Plan (do not submit unless requested).

As noted above, an Inspection & Maintenance (I&M) Plan must be developed and implemented by August 19, 2010. Given the deficiencies at the dam and the calculated inadequate stability, it is important that you routinely monitor the dam. Please submit your I&M Plan for review.

Please keep in mind that any repair or construction related to the dam may require permits from the Department. Well in advance of beginning work at the dam, please check with the Regional Permit Administrator in the Raybrook office ((518) 897-1234) to see if any permits are needed.

Please contact me at (518) 402-8138 if you have any questions.

Sincerely,



Donald E. Canestrari, P.E.
Environmental Engineer 2
Dam Safety Section

cc w/enc: Supervisor, Town of Elizabethtown
ec w/enc: Raymond Thatcher, Director, Essex County Office of Emergency Services
Bill Wasilauski, NYSDEC, Regional Water Engineer, Region 5, Warrensburg
Dominic Fontana, NYSDEC, Water, Region 5, Raybrook
Jim Reagan, NYSDEC, Operations
Thomas Martin, NYSDEC, Regional Forester, Region 5, Raybrook
Guy VonDenDriesch, NYSOGS, Division of Design
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