

July 7, 2010

Certified Mail No. 70100780000183770535 Return Receipt Requested

Ms. Susan Hampson 6385 Marlow Drive Cumming, GA 30041

Subject:

Amended Dam Safety Order

Dam Name:

Hathaway Pond Dam

Location of Dam:

Rochester MA00368

National ID No.:

Known Condition: UNSAFE

Hazard Potential:

Significant

## Dear Ms. Hampson:

In accordance with 302 CMR 10.08, the Department of Conservation and Recreation (DCR), Office of Dam Safety (ODS), has determined that the Hathaway Pond Dam does not meet accepted dam safety standards, is in Unsafe condition and is a threat to life and/or property downstream. On February 22, 2008 DCR issued a Certificate of Non-Compliance and Dam Safety Order after determining that the dam was in Poor condition.

On March 16, 2010, in response to an emergency request for assistance placed by the Rochester Fire Department through the Massachusetts Emergency Management Agency, ODS sent its consultant Pare Corporation (Pare) to the dam site. Pare's engineer performed an emergency inspection of the Hathaway Pond Dam following a very significant rainfall and runoff event which resulted in above normal spillway flow at the dam. During the inspection Pare's engineer observed a sizable sinkhole adjacent to the dam spillway and located in the dam crest. As a result of the March 16, 2010 inspection findings and the observed sinkhole. ODS determined that the dam was STRUCTURALLY DEFICIENT and downgraded the dam's condition to UNSAFE. In addition, due to a second storm event on March 29, 2010,

COMMONWEALTH OF MASSACHUSETTS . EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

Department of Conservation and Recreation 251 Causeway Street, Suite 600 Boston MA 02114-2119 617-626-1250 617-626-1351 Fax www.mass.gov/dcr



Deval L. Patrick Governor

Ian A. Bowles, Secretary, Executive Office of Energy & Environmental Affairs

Timothy P. Murray Lt. Governor

Richard K. Sullivan, Jr., Commissioner Department of Conservation & Recreation ODS requested that Pare visit the site on March 30, 2010. Furthermore, ODS staff visited the dam on May 7, 2010 and observed that the dam remains in an Unsafe condition and still presents a potential threat to public safety.

In the February 22, 2008 Certificate of Non-Compliance you were ordered to conduct the following in accordance with G.L. c. 253, Sections 47, and 302 CMR 10.07 and 10.08:

- 1) Conduct Follow-Up Inspections at 6 month intervals until adequate repairs are made or the dam is adequately breached.
- Hire a qualified dam engineering consultant to conduct a Phase II Inspection and Investigation of the dam and submit the report to the Department no later than November 30, 2008.
- 3) Bring the dam into compliance and complete repair, breach or removal work no later than November 30, 2009.
- 4) Additional Requirements:
  - a) Furnish copies of all required submittals listed in items 1-3 above via certified mail.
  - b) Maintain compliance with Commonwealth's Wetlands Protection Laws where you may have to seek approval from your local Conservation Commission in accordance with G.L. c. 131, section 40. You are obligated to contact and maintain communication with the appropriate Conservation Commissions and any other local, state or federal permitting agency to ensure compliance with the Wetlands Protection Act and any other regulatory requirements.
  - c) Inform certain parties about the condition of the dam and developing plans to bring the dam into compliance with dam safety regulations.
- 5) The February 22, 2008 Certificate of Non-Compliance and Dam Safety Order is hereby amended to include the following additional requirements. Undertaking these requirement items will assist in determining if it remains safe to continue maintaining the impoundment at or near normal water levels.
  - a) You are ordered to take the following immediate actions:
    - i) Within 15 days of receipt of this Amended Order, you are ORDERED to lower the impoundment level behind the dam by removing boards that are in place on top of the concrete weirs. The new water level shall be no lower than the crest of the permanent concrete weirs in each of the three center spillway channels or at approximately El 16 as referred to in the November 18, 2006 Phase I Inspection Report. As a result, the new impoundment water level will approximately 1 foot lower from the normal level established by the crest of the boards that are in place on top of the concrete weirs (approximately El 17).

The DCR Commissioner is authorized to establish the maximum allowable water elevation for impoundments pursuant to G.L. c. 253, section 47 and in accordance with 302 CMR 10.08 (6) and the Memorandum of Understanding between DEP and DCR relative to lake water level drawdowns/dam repair projects. You must maintain the maximum allowable normal water elevation at or below the elevation stated above until such time as repairs to the dam have been completed and your engineer certifies it is safe to re-impound water behind the dam to the full hydraulic height of the structure.

- ii) You are also to remove any accumulated debris and obstructions to flow that may exist on the approach to the dam spillways and within the spillways to maintain spillway capacity.
- iii) You shall prevent flow into the right spillway channel to the greatest extent possible until it is established that right spillway channel flow is not related to development of the sinkhole, or until the sinkhole is adequately repaired.
- iv) You shall not remove stoplogs located in the spillway channels adjacent to the right and left abutments to an elevation lower than that of the concrete weir crests in the 3 center spillway channels.
- b) Within 30 days of receipt of this Amended Order you are to assign your engineer to conduct a thorough inspection of the spillway channel adjacent to the right spillway abutment and the sinkhole. Prior to the inspection your engineer must submit a plan for the inspection to ODS. At a minimum, the inspection should include the following:
  - description of how the spillway channel will be dewatered to facilitate the inspection;
  - ii. description of how the spillway channel will be cleaned and prepared for inspection:
  - description of how the spillway channel will be inspected in order to determine iii. if flow within this spillway channel is related to development of the sinkhole;
  - description of how to inspect of the sinkhole. iv.
- c) Within 45 days of receipt of this Amended Order you are to submit a report that documents results of the inspection in section b above. The report is to be submitted to ODS in electronic pdf copy and one hard copy.

- d) In the event that your engineer concludes that spillway flow in this channel is not related to development of the sinkhole, use of this channel may be restored if your engineer concludes it is safe to do so.
- e) You are to take such steps as are necessary to protect the overall dam structure. Such steps are to be planned and conducted in consultation with and at the recommendation of a qualified registered professional engineer knowledgeable in the field of dam safety. Debris, timber, and other material removed from the spillway and the discharge channel shall be disposed of outside of the stream channel in a lawful manner.

By taking such action and thereafter maintaining the spillway, discharge channel and low level outlet free of debris and obstructions, you shall henceforth maintain the normal (non-flood) pond level upstream of the dam at an elevation no greater than the elevation of the crest of the permanent concrete weirs in the 3 center spillway channels. Every 7 days and following any rainfall event in the vicinity of the dam exceeding 1.0 inches of rain in 24 hours, you shall visually verify that the spillway remains open and free from obstructions, the pond level remains or is receding to the maximum normal level established by this ORDER, and the dam is stable. You shall keep written records of all such verification site visits which shall include, at a minimum, the date, time, impoundment level and estimated rainfall over the past 24 hours.

You are to inform, in writing as soon as possible, ODS, the Rochester Emergency Management Director (EMD) and the Rochester Conservation Commission of all actions taken at the dam pursuant to this amended order.

- a. You are to inform, in writing within 15 days of receipt of this ORDER, ODS, the Rochester EMD and the Rochester Conservation Commission of the steps you will take to closely monitor the dam during significant rainfall/runoff events. You are responsible for mis-operation of the dam.
- 6) You are ORDERED to Conduct Follow-Up Inspections.

As ODS has downgraded the dam from Poor to Unsafe condition, , in accordance with 302 CMR 10.07, you are now required to complete follow-up visual inspections, conducted by a registered professional engineer qualified to conduct dam inspections at your cost, every 90 days following receipt of this ORDER until adequate repairs are made or the dam is adequately breached.

Follow-up inspections are to be summary in format and shall provide a written description, including photographs, of any changes in condition. Your engineer is to use the attached Office of Dam Safety Poor and Unsafe Condition Follow-Up Inspection Form to report follow-up inspection findings. The form is also available electronically on the Office of Dam Safety web site. Your engineer shall include a cover letter on engineering firm letterhead that briefly summarizes the current follow-up inspection and findings. Your engineer shall sign and stamp the cover letter.

You shall submit one (1) hard copy and one (1) electronic pdf copy of all completed follow-up visual inspection reports to ODS within 30 days of the date of follow-up inspection field work.

ODS notes that on May 7, 2010 a site meeting was held with the dam owner Ms. Hampson, the owner's consultant Bill Madden from GAF Engineering, Inc., and ODS staff. Mr. Madden recommended the dam owner authorize an evaluation of the dam's hazard potential and consider submitting a hazard reclassification request to ODS. ODS understands that the owner may have GAF Engineering, Inc. perform a Hydrologic and Hydraulic study with a dam break analysis to determine if the hazard class of the dam should be downgraded from significant hazard to low hazard.

Please be advised that in accordance with G.L.c. 253, section 47, "any person...who fails to comply with the provisions of this chapter or of any order, regulation or requirement of the department relative to dam safety, shall be fined an amount not to exceed \$500 for each offense, to be fixed by the court." Furthermore, each violation shall be regarded as a separate and distinct offense and, in case of continuing violation, each day's continuance therefore shall be deemed to be a separate and distinct offense.

Nothing in this ORDER releases the owner from the requirements of any prior Dam Safety Order issued for issued for this dam.

In accordance with 302 CMR 10.08, this AMENDED DAM SAFETY ORDER will be recorded at the Registry of Deeds. Issuance of a Certificate of Compliance following adequate repair or breaching of the dam will be required to discharge the AMENDED DAM SAFETY ORDER.

Please direct any technical questions, correspondence, or submittals to Edward Hughes, Department of Conservation and Recreation, Office of Dam Safety, 251 Causeway Street, Suite 600, Boston, MA 02114. Legal questions should be directed to the DCR Assistant General Counsel, Ariana Johnson, 251 Causeway Street, Suite 600, Boston, MA 02114.

Thank you for your cooperation.

Sincerely,

Mchard K. Sullivan, Jr.

omnissioner

Cc: State Senator Joan M. Menard

State Representative William M. Straus

Richard LaCamera, Rochester Town Administrator

Paul Ciaburri, Rochester Emergency Management Director

Laurell J. Farinon, Agent, Conservation Commission

Liz Kouloheras, DEP Wetland Section Chief

Jason Zimmer, DFG

Tim Purinton, DFG

Dave Keddell, U.S. Army Corps of Engineers

Alicia McDevitt, MEPA

Jack Murray, DCR

Michael Misslin, DCR

William Salomaa, DCR

Edward Hughes, DCR

Ariana Johnson, Esq., DCR

Daniel Bertrand, DCR