

July 12, 2011

Certified Mail No. 7010 0780 0001 8377 0986 Return Receipt Requested

Mr. Mark Rasmussen, President Coalition for Buzzards Bay 114 Front Street New Bedford, MA 02740

Subject:

Amended Dam Safety Order

Dam Name:

Hathaway Pond Dam

Location of Dam: National ID No.:

Rochester MA00368

Known Condition: UNSAFE Hazard Potential:

Significant

Dear Mr. Rasmussen:

The Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS) received notice that the Coalition for Buzzards Bay is the new owner of Hathaway Pond Dam. In accordance with 310 CMR 10.05, ODS issued a Dam Registration form which was mailed under separate cover.

In accordance with 302 CMR 10.08, ODS has determined that the Hathaway Pond Dam does not meet accepted dam safety standards and in its current state is in Unsafe condition and is a potential threat to life and/or property downstream. On February 22, 2008 DCR issued a Certificate of Non-Compliance and Dam Safety Order (Certificate of Non-Compliance) to Ms. Susan Hampson, the prior dam owner. On July 7, 2010, DCR issued an Amended Dam Safety Order. Both documents are attached in Appendix 1.

Due to recent findings presented by the prior dam owner's engineer (GAF Engineering, Inc.) that reveal very serious advanced structural deficiencies with Hathaway Pond Dam, ODS hereby issues an Amended Dam Safety Order. Please refer to items 1-6 below for current Amended Dam Safety Order requirements. A synopsis of previously issued Dam Safety Orders previously issued to Ms. Hampson is included in Appendix 2.

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On March 16, 2011 Mr. Bill Madden from GAF Engineering Inc., performed a thorough inspection of the five spillway bays. On March 18, 2011, Mr. Madden informed ODS of the inspection and stated that he observed voids below the concrete slab sluiceway floors in 4 of the 5 sluiceway bays which had undermined the dam structure and is the most likely cause of the sinkhole located at the right spillway abutment. Mr. Madden stated that the spillway structure is unsafe and recommended that the impoundment be drawn down to a level no higher than one foot above the concrete spillway slab floor elevation to relieve hydrostatic pressure on the dam structure and to prevent dam failure.

Mr. Madden submitted a Follow-up Inspection report to ODS on March 29, 2011 which documents the findings of the March 16, 2011 inspection. The report notes that the water level of the pond was lowered to a level lower than that identified in the July 7, 2010 Amended Dam Safety Order. The report further explains that the water level was lowered and the concrete slab spillway floor area was dewatered to facilitate inspection of the five spillway sluiceways.

The report states the inspection found very significant erosion of the concrete slab sluiceway floors. In the far right sluiceway, referred to as sluiceway 1, the concrete sluiceway floor slab has completely eroded away. In addition, there was a void approximately 52 inches deep in the soil below the floor slab elevation. The adjacent sluiceways, number 2 and 3, were observed to be similarly compromised with loss of the concrete sluiceway floor slab and large voids beneath the slab elevation up to 5 feet deep.

On March 31, 2011, ODS staff visited the dam site and observed that stop-logs were removed from the two left bays with one foot of logs remaining as measured from the spillway floor slab to the top of the stop logs. Stop logs had not been removed from the far right bay. The top stop log within the far right bay was at an elevation equal to the concrete weir crest elevation in the center bays. The water level of the impoundment was approximately 1 foot above the concrete spillway slab floor elevation which was being controlled by the several remaining boards in the two left bays.

Given the findings of the March 16, 2011 inspection, ODS is of the opinion that Hathaway Pond Dam is in an active state of failure. This is evidenced by the occurrence of the large sinkhole that developed in March of 2010 and by the identification of the cavernous voids that exist beneath the sluiceway floor slab elevation as observed on March 16 and 31, 2011. The dam foundation and overall dam structural stability has been compromised and therefore the dam is not fit to impound water until adequate repairs have been made.

In consideration of the increased deteriorated condition of the dam observed on March 16 and 31, 2011, and your new ownership of the dam, ODS hereby issues an Amended Dam Safety Order. In accordance with the authority of G.L. c. 253, section 47, 302 CMR 10.07 and 10.08. you are hereby ORDERED to comply with the following:

- 1. Hire a qualified registered professional engineer with dam engineering experience (engineer) and notify ODS of your hire no later than August 20, 2011.
- 2. Prior to Refilling Hathaway Pond, Prepare and Implement Plans and Specifications Sufficient to Bring the Dam into Compliance with Dam Safety Regulations.

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 draw-downs/dam repairs projects. You are ordered to maintain the current operation, as observed by ODS staff on March 31, 2011 at Hathaway Pond Dam until such time as permitted repairs to the dam have been completed. (On March 31, 2011, ODS observed weir boards placed no higher than one foot above the spillway concrete floor elevation in the furthest left and furthest right weir bays and weir boards removed from the top of the concrete weirs in the 3 center weir bays.)

You are ordered to engage your engineer to prepare a compliance plan. The compliance plan, which must include preliminary conceptual design sketches and technical description, must demonstrate how you will correct current deficiencies in order to bring the dam into compliance with dam safety regulations. You must submit your plan to achieve compliance with Dam Safety regulations to the Office of Dam Safety no later than **September 15**, **2011**.

3. Monitoring during significant rainfall events:

Following any rain event in the impoundment watershed exceeding 2.0 inches of rain in 24 hours, you shall verify that the approach and discharge areas and the spillway remain open and free of obstructions and that current operating levels are maintained or are receding to the (non-runoff or flood) level. 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 totals over the storm event.

4. Notifications:

You must notify the Rochester Conservation Commission and other applicable local parties of this ORDER to maintain the above-specified operation at Hathaway Pond dam. It is your responsibility as the owner of the dam to file the necessary federal, state or local permit applications that apply to changes in water level and any work you plan to conduct at the dam site.

5. Apply for a Chapter 253 Dam Safety Permit.

Massachusetts Dam Safety Regulations 302 CMR 10.09 require "Any person(s) who propose to construct, repair, materially alter, breach or remove a dam, pursuant to M.G.L. c. 253, must file with the Commissioner a permit application to determine whether or not a Chapter 253 Dam Safety Permit is required. Following completion and submittal of your plan to achieve compliance with Dam Safety regulations your engineer must prepare final plans and specifications and submit a proper application for a Chapter 253 Dam Safety Permit to the Office of Dam Safety. The application package must include the proper application form, as well as stamped plans and other engineering exhibits and calculations as are judged necessary. Information on filing a Chapter 253 Dam Safety Permit Application may be found at our website: http://www.mass.gov/dcr/pe/damSafety/index.htm.

Work performed under a chapter 253 Dam Safety Permit must be designed and supervised by a qualified registered professional engineer with dam engineering experience. Additional permits from other agencies may be necessary before work at the dam under a Chapter 253 Dam Safety Permit may begin. Work may not begin at the dam until all required permits are issued. The Chapter 253 Dam Safety Permit Application must be submitted to ODS no later than **January 15**, **2012**.

6. Conduct Follow-Up Inspections:

Considering the current operation will be maintained, 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, at 6-month interval following receipt of this ORDER until the dam is brought into compliance with Dam Safety regulations.

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.

In addition, periodic site visits are to be performed to insure that the current dam operations are maintained.

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 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 Dam Safety Confirmation that the dam is in compliance, 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.

Édward M. Lambert, Jr.

Commissioner

Cc: State Senator Michael J. Rodrigues

State Representative William M. Straus

Richard LaCamera, Rochester Town Administrator

Paul Ciaburri, Rochester Emergency Management Director

Laurell J. Farinon, Agent, Rochester Conservation Commission

Liz Kouloheras, DEP

Jason Zimmer, DFG

Dave Keddell, U.S. Army Corps of Engineers

Maeve Vallely Bartlett, MEPA

Jack Murray, DCR

Michael Misslin, DCR

William Salomaa, DCR

Edward Hughes, DCR

Ariana Johnson, Esq., DCR

Daniel Hunt, DCR





February 22, 2008

Certified Mail No. 7007 0710 0005 4302 0291 Return Receipt Requested

Mrs. Susan Hampson 6385 Marlow Drive Cumming, GA 30041

Subject:

CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER

Dam Name:

Hathaway Pond Dam

Location:

Rochester

National ID No: Known Condition: Poor

MA00368

Hazard Potential: Significant

Dear Mrs. Susan Hampson:

In accordance with 302 CMR 10.08, the Department of Conservation and Recreation (DCR), Office of Dam Safety (ODS) has determined that Hathaway Pond Dam does not meet accepted dam safety standards and is a potential threat to pubic safety. Therefore, you are being issued a CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER.

Records at the Office of Dam Safety indicate Mrs. Susan Hampson to be the Owner of the Hathaway Pond Dam, National Inventory of Dams No. MA00368. The Dam is classified by the Department of Conservation and Recreation (DCR), Office of Dam Safety (ODS) as an Intermediate Size, Significant Hazard Potential Structure. Significant Hazard Potential Dams are dams that may cause the loss of life and property damage in the event of dam failure.

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

Timothy P. Murray Lt. Governor

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

Richard K. Sullivan, Jr., Commissioner Department of Conservation & Recreation On 11/18/2006, an inspection of the Hathaway Pond Dam was completed by your engineering consultant, GAF. As a result of this inspection, the dam was determined to be **STRUCTURALLY DEFICIENT** and in **POOR** condition. The dam has been found to be in need of repair, breaching or removal to bring the dam into compliance with dam safety regulations.

The basis for the CERTIFICATE OF NON-COMPLIANCE and POOR CONDITION findings are the inspection report results for the Hathaway Pond Dam.

MGL Chapter 253, Sections 44-48 set forth the jurisdiction for the Office of Dam Safety and its authority to take action and order actions to be taken. For your information a copy of the Dam Safety Regulations, 302 CMR 10.00 Dam Safety, is enclosed.

DAM SAFETY ORDER:

In accordance with the authority of MGL Chapter 253, Section 47, POOR or Inadequate Dams, and pursuant to 302 CMR 10.07 Inspection Schedule and 10.08 Compliance with Inspection Results you are hereby **ORDERED** to comply with the following:

1) Conduct Follow-up Inspections: The owner shall complete follow-up visual inspections at 6-month intervals, conducted by a registered professional civil engineer qualified to conduct dam inspections, at your cost, until adequate repairs are made or the dam is adequately breached. The first Follow-up inspection shall be submitted to ODS no later than May 31, 2008.

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 Condition Dam 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 two (2) hard copies 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.

2) Conduct Phase II Inspection and Investigations. The owner shall within 180 days of receipt of this CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER hire at your cost, a qualified registered professional engineer with dam engineering experience (engineer) to conduct a Phase II Inspection and Investigation of the dam to evaluate the structural integrity and spillway hydraulic adequacy of your dam and to develop/implement a plan to bring the dam into compliance with dam safety regulations by adequately repairing, breaching or removing the dam (see attached Phase II Investigation Outline).

- a. The owner shall commence the Phase II Inspection and Investigation no later than **August 15**, **2008**. The Phase II Inspection and Investigation is to conform to the attached <u>Phase II Investigation Outline</u>. You are to, in a letter to ODS, no later than **July 31**, **2008**, identify your selected engineer and inform ODS of the start date of the Phase II work.
- b. The Phase II Inspection and Investigation is to be completed, signed and stamped by your engineer and copies of the Phase II final report are to be delivered to ODS no later than **November 31, 2008**.
 - You shall include a cover letter with the submitted Phase II report which describes your selected alternative to bring the dam into compliance with dam safety regulations. The owner shall submit a statement of your intent to implement inspection report recommendations to address structural and operational deficiencies to ODS upon submission of the required Phase II Inspection and Investigation completed by your engineer.
- 3) Bring the dam into compliance and complete all repair, breach or removal work no later than November 31, 2009. With your Phase II submittal, you must also provide a proposed timeline to design, permit and construct the selected alternative to repair, breach or remove the dam. The selected alternative must be completed, and the dam brought into compliance with Dam Safety regulations, by November 31, 2009.

4) Additional Requirements:

- You shall furnish copies of all required submittals listed above via certified mail.
- b. In order to maintain compliance with the Commonwealth's Wetlands Protection Laws you may have to seek requisite approval from your local Conservation Commission in accordance with G.L. c. 131, §40. You are obligated to contact and maintain communication with the Rochester Conservation Commission and any other local, state or federal permitting agency the ensure compliance with the Wetlands Protection Act and any other regulatory requirements.
- c. You must inform the following parties about the condition of the dam and your developing plans to bring the dam into compliance with dam safety regulations: all abutters of the impoundment upstream; property owners within one-half mile downstream of the Hathaway Pond Dam; Jason Zimmer, District Manager, Southeast Wildlife District, Division of Fisheries & Wildlife, 195, MA 01720; Liz Kouloheras, Department of Environmental Protection, Southeast Region, 20 Riverside Drive, MA 01887; Paul Ciaburri, Rochester Emergency Management Director; Bradford N. Morse, Chair, Board of Selectmen, Town of Rochester.

Please be advised that in accordance with G.L. c. 253, § 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 a continuing violation, each day's continuance thereof 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 this dam, including any Dam Safety Order to submit follow-up inspections on a 6-month schedule.

In accordance with 302 CMR 10.08, this CERTIFICATE OF NON-COMPLIANCE and 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 CERTIFICATE OF NON-COMPLIANCE and 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 800, Boston, MA 02114. Legal questions should be directed to the DCR Assistant General Counsel, Ariana Johnson, 251 Causeway Street, Suite 600, Boston, MA 02114. Additional dam safety information can be found at the DCR-ODS website. http://www.mass.gov/dcr/pe/damSafety/index.htm.

Thank you for your cooperation.

Sincerely

Richard K. Sullivan, Jr. Commissioner

CC: Bradford N. Morse, Chair, Board of Selectmen, Town of Rochester Paul Ciaburri, Rochester Emergency Management Director Rosemary Smith, Chair of Rochester Conservation Commission Paul Sneeringer, U.S. Army Corps
Liz Kouloheras, DEP Wetland Section Chief
Deerin Babb-Brott, MEPA
Jason Zimmer, DFW
Jack Murray, DCR
Michael Misslin, DCR
William Salomaa, DCR
Edward Hughes, DCR
Ariana Johnson, Esq., DCR
Elizabeth Sorenson, DCR
Joan Kimball, Riverways

Department of Conservation and Recreation Office of Dam Safety Phase II Inspection and Investigation Outline

I.	Review of existing information
II.	Updated Detailed Phase I surface inspection in compliance with Office of Dam Safety Phase I Inspection format
III.	Subsurface Investigations – borings, sampling, analysis
IV.	Topographic Survey, wetlands flagging/delineation, of sufficient detail to support not only the Phase II effort, but sufficient for the future implementation of design phase
V.	Stability and seepage analyses – Seismic and static stability evaluation of dam (upstream and downstream slopes, internal materials), seepage potential, internal erosion potential, piping potential
VI.	Hydrologic/Hydraulic Analysis and spillway inadequacy resolution
VII.	Alternatives analysis and presentation of conceptual designs and associated estimated design, permitting and construction costs to bring the dam structure into compliance with Chapter 253 Section 44-48 and 302 CMR 10.00 Dam Safety Regulations by either executing selected repair plan or breach plan
VIII.	Final Report Presented to the Office of Dam Safety

Commonwealth of Massachusetts Department of Conservation and Recreation Office of Dam Safety Poor Condition Dam Follow-up Inspection Form

(Complete this inspection form and provide a cover letter on consulting firm letterhead that briefly summarizes the current follow-up inspection and findings. The cover letter shall be signed and stamped by the Registered Professional Engineer in charge of the inspection)

Dam Name:

Dam Owner:

Nat. ID Number:

Hazard Potential:

Location of Dam (town):

Coordinate location (lat, long):

Date of Inspection:

Weather:

Consultant Inspector(s): firm name and name of Registered Professional Engineer in charge of inspection.

Others in Attendance at Field Inspection: include list of names, affiliation and phone numbers.

Attachments:

Updated site sketch with photo locations, Updated photos, and copy of locus map from Phase I report and other applicable attachments.

- I. Previous Inspection date/Overall Condition:
 - Date of most recent formal Phase I Inspection Report:
 - List the overall condition reported in most recent Phase I Inspection Report:
- II. Previous Inspection Deficiencies:
 - List identified deficiencies in the most recent Phase I Inspection Report:
- III. Overall Condition of Dam at the Time of the Current Follow-up Inspection:
 - a. State the current condition
 - b. Have conditions changed since the previous inspection? Yes or no.
- IV. Comparison of Current Conditions to Condition Listed in Previous Phase I Inspection Report:
 - a. Have any of the deficiencies listed in the previous Phase I Inspection Report worsened?
 - b. If yes, list the changes.

- c. Are there any additional deficiencies that have been identified in the current inspection?
- d. If yes, list the deficiencies and describe.

V. Dam Safety Orders:

• List dam safety orders that have been issued to the dam owner pertaining to this dam.

VI. Maintenance:

- 1. Indicate if there exists an operation and maintenance plan for the dam.
- 2. Indicate if it appears the dam is being maintained.

VII. Recommendations:

- VIII. Other Comments or Observations:
- IX. Updated Site Sketch with Photo Locations:
- X. Updated Photos:
- XI. Copy of Locus Map from Phase I Report:
- XII. Other applicable attachment:



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

National ID No.:

MA00368

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,

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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

Timothy P. Murray

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

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.
- 2) 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:
 - i. 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;
 - iii. description of how the spillway channel will be inspected in order to determine if flow within this spillway channel is related to development of the sinkhole;
 - iv. description of how to inspect of the sinkhole.
- 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 dan'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,

Richard K. Sullivan, Jr.

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

Appendix 2

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, 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 remained in an unsafe condition and presented a potential threat to public safety.

In the February 22, 2008 Certificate of Non-Compliance ODS ordered the dam owner 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 the dam is brought into compliance with Dam Safety regulations.
- 2) 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 no later than November 30, 2009.
- 4) Additional Requirements:
 - Furnish copies of all required submittals listed in items 1-3 above via certified mail.
 - 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.
 - Inform certain parties about the condition of the dam and developing plans to bring the dam into compliance with dam safety regulations.

The February 22, 2008 Certificate of Non-Compliance and Dam Safety Order was amended on July 7, 2010 (see attached) to include the following additional requirements:

5) The purpose of these requirements was to assist in determining if the dam was safe to continue maintaining the impoundment at or near normal water levels.

- Lower the impoundment level behind the dam by removing boards that are in place on top of the concrete weirs within 15 days of receipt of this amended order. The new water level shall be no lower than the crest of the permanent concrete weirs in each of the 3 center spillway channels or at approximately El 16 as referred to in the November 18, 2006 Phase I Inspection Report.
- 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.
- 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.
- Do not remove stop-logs 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 three center spillway channels.
- Within 30 days of receipt of this amended order the owner was to assign her engineer to conduct a thorough inspection of the spillway channel adjacent to the right spillway abutment and the sinkhole. Prior to the inspection the owner's engineer must submit a plan for the inspection to ODS.
- Within 45 days of receipt of this Amended Order the owner was 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.
- In the event that the owner's engineer concludes that the spillway flow in this channel is not related to development of the sinkhole, use of this channel may be restored if the engineer concludes it is safe to do so.
- Take 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.
- The dam owner is to inform, in writing, ODS, the Rochester Emergency Management Director (EMD) and the Rochester Conservation Commission of all actions taken at the dam pursuant to this amended order.
- 6) Conduct Follow-Up Inspections at 90 day intervals until adequate repairs are made or the dam is brought into compliance with Dam Safety regulations.