

# The State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES



# Robert R. Scott, Commissioner

Department of Environmental Services State Dam Safety Program Water Division, Dam Bureau 29 Hazen Drive, P.O. Box 95 Concord, NH 03302-0095

Intent to Complete Repairs
DAM #D029007/DSP #19-016
DAM Pickpocket

RE:

Letter of Deficiency:

Issued on July 25, 2019

Dear Dam Safety Program:

In response to the above referenced Letter of Deficiency (LOD), I concur with the New Hampshire Department of Environmental Service's, Dam Bureau (NHDES) recommendations, and specifically agree to complete the following items by the indicated schedule.

### DATE: October 1, 2019

- 1. Remove the log from the spillway. (Photos: L, O & P).
- 2. Repair the sinkhole on the left embankment crest. (Photo: F).
- 3. Update the OMR form including the following items, at a minimum;
  - a. High hazard classification;
  - b. Downstream area description; and
  - c. Observation and recording of seepage in the old mill foundation and adjacent to the fish ladder.
- 4. Remove the trees and brush from the crest, upstream and downstream portions of the embankment, within 15 feet of the spillway abutment walls and within 15 feet of the toe of the embankments. (Photos: B E, G N).
- 5: Repair the erosion and loss of material adjacent to left downstream spillway abutment wall on the left embankment section. (Photo: G).
- 6. Repair the erosion and loss of material, likely due to foot traffic, left of upstream wing wall on the left embankment section. (Photo: H).
- 7. Repair the erosion and loss of material adjacent to end of the right spillway abutment wall on the right embankment section. (Photos: N & O).

#### DATE: January 1, 2020

8. As required by RSA 482:11-a and in accordance with Env-Wr-500, the owner shall develop an EAP.

#### DATE: June 1, 2020

9. Engage the services of a consultant qualified in dam-related work to complete an engineering evaluation or analysis of, at a minimum, the items noted below and submit a report to NHDES. The report should include all investigation findings and include recommendations and a schedule for reconstruction, as warranted, to make the dam

www.des.nh.gov 29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095 (603) 271-3503 • Fax: (603) 271-6120 • TDD Access: Relay NH 1-800-735-2964 compliant with the current standards for high hazard dams. In order to insure that the selected consultant meets the requirements of Env-Wr 403.03(a)(1). NHDES recommends that you submit the resume of your proposed engineering consultant for review in accordance with Env-Wr 403.03 (a)(1) prior to contracting services.

- a. NHDES has reviewed the December 30, 2016 (Revised: December 15, 2017) VHB Dam Breach Analysis memo received by NHDES by e-mail dated January 26, 2018. NHDES met with VHB and Mr. Paul Vlasich on June 27, 2019. Many of the comments from the DRAFT February 2018 LOD have been addressed and removed from this revised LOD. NHDES has the following comments which should reviewed and addressed by your engineering consultant:
  - The HEC-HMS model used for the dam breach evaluation was a portion of the model used to evaluate the downstream Exeter Great Dam D082001 and was reviewed and revised by the consultant using Atlas 14 rainfall and distribution and is suitable for use in the dam breach analysis;
  - ii. Inundation maps;
    - 1. Layout of maps is difficult to use;
    - 2. Sunny day inundation limits difficult to see through 100-yr shading;
    - 3. Edge of 100-yr breach inundation limits not distinct;
    - 4. Potential high or significant hazard impacts;
      - a. No elevation information, contours, etc. included on maps or tables for residence located northeast of Powder Mill Road and shown surrounded but not flooded by the 100-yr inundation breach limits on Maps 2-4 and 2-5. This residence is located within the FEMA floodway and 100-yr flood hazard zone;
      - b, Residence/building at Green Gate Hall is shown on the edge of the 100-yr inundation breach limits on Map 2-11. This structure is partially located within the FEMA floodway and 100-yr flood hazard zone;
      - c. No elevation information included on maps or tables for residence located north of the Exeter River and west of Court Street and shown surround and possibly flooded by the 100-yr inundation breach limits on Map 2-10. This residence is located within the FEMA floodway and 100-yr flood hazard zone; and
      - d. No elevation information included on maps or tables for residence located south of the Exeter River and west of Court Street and shown flooded by the 100-yr inundation breach limits on Map 2-10. This residence is located within the FEMA floodway and 100-yr flood hazard zone.
- b. The hydrologic model referred to in item 9 a.i. indicates that the dam does not have sufficient discharge capacity to pass the runoff generated by the 2.5 x 100 year event required for a high hazard dam [Env-Wr 303.11 (a)(3)]. As such, a more detailed assessment of the watershed hydrology will likely be required for use in designing reconstruction of the dam to pass this event with a minimum of one foot of remaining freeboard and without manual operations.

Intent to Complete Repairs Dam #D029007/DSP #19-016 June 25, 2019 pg. 3

#### **DATE:** June 1, 2022

10. Submit an application for reconstruction of the dam, or a plan to otherwise comply with Env-Wr 303.12. Permits from other programs, including NHDES, Wetlands Program may be required.

## DATE: December 1, 2025

11. Complete the reconstruction of the dam.

You must sign and return this Intent form either agreeing to comply with the listed items by the dates indicated OR proposing amendments to either the listed work items or compliance dates (please state reasons for proposal and use reverse side if more space is needed). NHDES will evaluate and respond to any reasonable requests for amending the scope of the work items or compliance dates in a timely manner. We have enclosed a self-addressed stamped envelope for you to return this form. You may also scan and e-mail the completed form to <a href="mailto:damsafety@des.nh.gov">damsafety@des.nh.gov</a> or fax it to (603) 271-6120.

Please note that meeting the statutory 45-day response deadline is necessary even if the first compliance deadline on the LOD is beyond that date. Failure to return the form or otherwise respond will result in NHDES initiating a proceeding to seek an administrative fine against you.

Signature of Owner:

(print name)

Date: 8/2/19.

ENG-: JRW