

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Flood Protection and Dam Safety

625 Broadway, Albany, New York 12233-3504

P: (518) 402-8185 | F: (518) 402-9029

www.dec.ny.gov

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

October 28, 2019

William Bill Chase
Supervisor, Town of Dannemora
78 Higby Road
Ellenburg Depot
Dannemora, NY 12935

Re: **Notice of Condition Rating – Unsound, Deficiency Recognized**
Chazy Lake Dam
DEC Dam ID#: 199-0282
Dannemora (T), Clinton County

Dear Supervisor Chase:

I conducted a routine visual inspection at the above referenced dam on October 15, 2019 as part of the Department of Environmental Conservation's (Department) ongoing Dam Safety program. I am writing to you because it is my understanding that you represent the owner of this structure. A copy of my Visual Observations is enclosed.

The left/right nomenclature used in this letter and in the enclosed Visual Observation Report is based on looking downstream from the center of the service spillway at the dam's crest.

The condition of the dam is similar to the condition noted in the previous inspection. The observations noted in the enclosed visual observations are primarily maintenance items. These items should be addressed during your ongoing maintenance program.

The Compliance Status Table below details the dam's current compliance status for those sections of the regulations that had or have specific deadlines for compliance.

Compliance Status Table:

<u>Citation</u>	<u>Requirement</u>	<u>Status</u>
673.6	Develop and implement a written Inspection & Maintenance Plan (I&M Plan). Owner to retain the Plan in good order and certify annually to the Department that it is complete. Guidance can be found at http://www.dec.ny.gov/lands/4991.html .	Certified to as complete on an annual basis on Annual Certification Form.



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673.7	Develop and distribute to the local emergency responders an Emergency Action Plan (EAP). EAP should be updated on an annual basis. Guidance for developing an EAP can be found at: http://www.dec.ny.gov/lands/4991.html	VIOLATION - EAP submitted on 10/23/2009. Submit updated EAP immediately.
673.8	Submit an Annual Certification to the Department January 31 of each year (certification is for the previous year). An annual certification form can be found at: http://www.dec.ny.gov/lands/58691.html	2018 Annual Certification received on 5/30/2019.
673.13	Complete and submit to the Department an Engineering Assessment (EA) by August 19, 2015. EA must be performed by a New York State Professional Engineer. The EA must be updated every 10 years after the initial submittal. EA guidance is available at: http://www.dec.ny.gov/docs/water_pdf/damfengarpt.pdf .	EA received on 6/30/2015.

Condition Rating

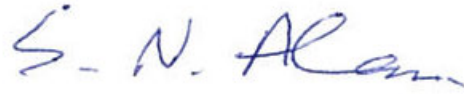
Due to the reported inadequate spillway capacity and structural stability of the embankment in the EA and the compliance issue in the table above, a **Condition Rating** of “**Unsound, Deficiency Recognized**” is hereby assigned to the Chazy Lake Dam. This Condition Rating means that the dam has several deficiencies which could be considered significant. These deficiencies are of such a nature that the safety of the dam cannot be assured. **The owner of a dam with a Condition Rating of Unsound is in violation of 6 NYCRR Part 673 and ECL Article 15 Section 0507.**

A written response to the Department is required of you within 30 days of the date of this letter. Your responsive letter must describe your plans, including a schedule, for bringing the dam into compliance and submission of an updated EAP. The EAP update is long overdue and needs to be expeditiously submitted to the Department and distributed to all Plan Holders.

Please keep in mind that any repair or construction activities related to the dam may require permits from the Department. Well before beginning any work on the dam, please check with the Regional Permit Administrator at the Department's Region 5-Ray Brook office (518-897-1234) to verify if any permits will be required.

If you have any questions regarding this letter, or the Dam Safety program in general, please contact me at (518) 402-9668.

Sincerely,

A handwritten signature in blue ink that reads "S. N. Alam". The signature is fluid and cursive, with the first name "S." followed by a middle initial "N." and the last name "Alam".

Syed Alam, P.E.
Professional Engineer 1
Dam Safety Section

ec w/ enc: Madisen Hetman, NYSDEC, Region 5, Dam Safety Representative
Director, Clinton County Emergency Management Office

New York State Department of Environmental Conservation
Bureau of Flood Protection and Dam Safety



Visual Observations

DAM NAME	Chazy Lake Dam			
STATE ID	199-0282	SECTION	D	HAZARD CODE
COUNTY	Clinton			C
NEAREST DS CITY/TOWN	Jerusalem			INSPECTION DATE
OWNER'S NAME	TOWN OF DANNEMORA			8/15/2019
				INSPECTOR(S)
				SNA/MLH
DOWNSTREAM HAZARD	High			TOWNSHIP
				Town of Dannemora

WATER LEVEL BEHIND DAM ~2 inches above primary spillway crest

DRAIN OPERATION Operational

DEFICIENCIES

- | | | |
|---|--|--|
| <input type="checkbox"/> 1)Seepage | <input type="checkbox"/> 4)Maintenance | <input type="checkbox"/> 7)Cracking |
| <input type="checkbox"/> 2)Slope Stability | <input type="checkbox"/> 5)Surficial Deterioration | <input type="checkbox"/> 8)Movement/Misalignment |
| <input type="checkbox"/> 3)Undesirable Growth | <input type="checkbox"/> 6)Voids | <input type="checkbox"/> 9)Data |

- Inspected with Eric Whitman (town staff)
- Right dam:
 - creacked and spalled concrete on upstream slope
- Auxiliaary spillway:
 - earth erosion upstream of spillway
- Mid dam:
 - Well maintained
- Left dam:
 - No erosion resistant cover on downstream slope



Photo 1 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Upstream slope of right dam



Photo 2 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Right dam crest



Photo 3 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Upstream slope of right dam



Photo 4 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Right dam crest



Photo 5 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Downstream slope of right dam



Photo 6 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Deteriorated concrete on upstream slope of right dam



Photo 7 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Deteriorated concrete on upstream slope of right dam



Photo 8 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Upstream slope of mid dam



Photo 9 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Mid dam crest



Photo 10 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Downstream slope of mid dam



Photo 11 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Downstream slope of mid dam



Photo 12 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Downstream slope left dam



Photo 13 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Upstream slope of left dam



Photo 14 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Left dam crest

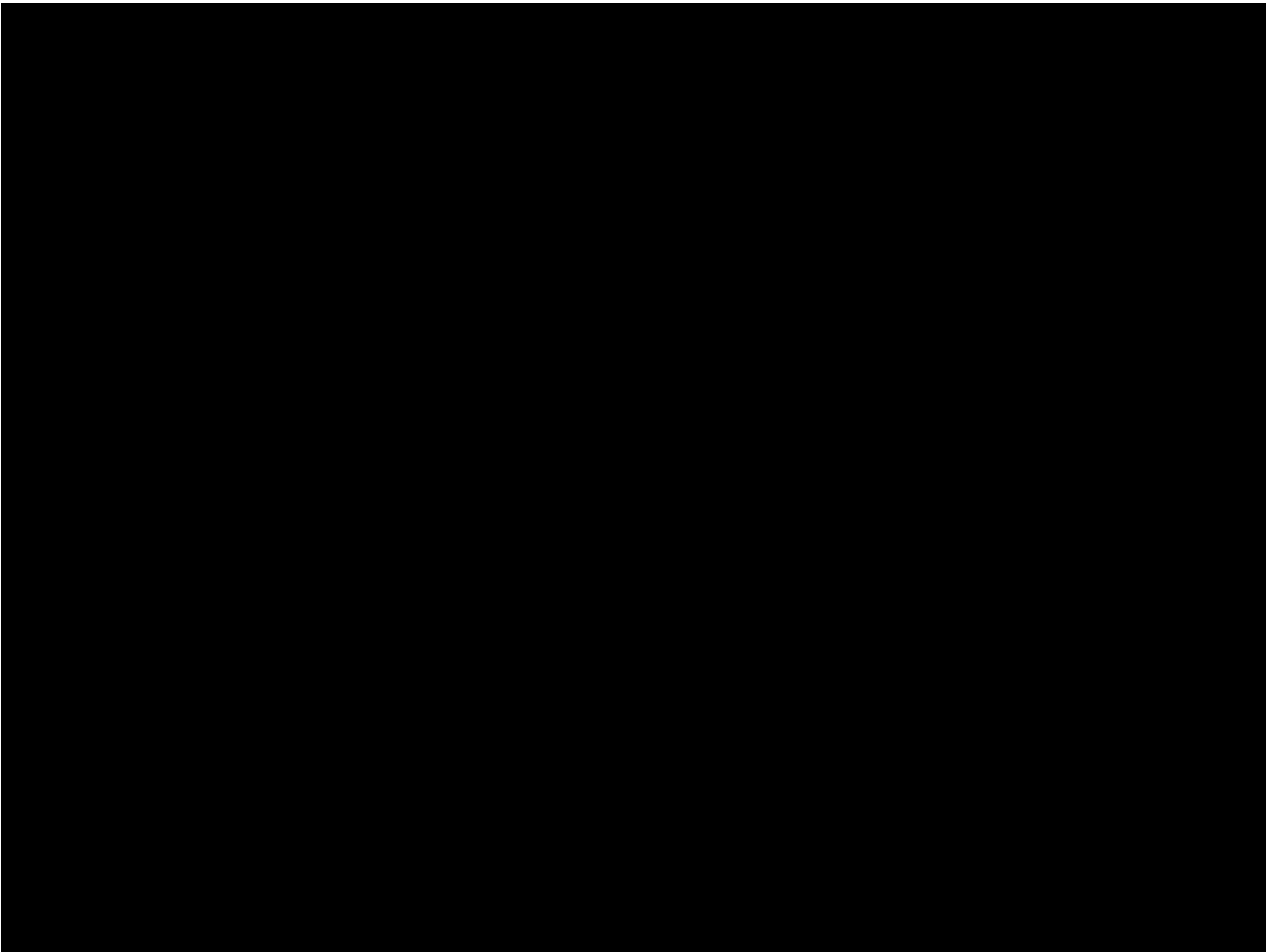


Photo 16 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Downstream slope of left dam



Photo 17 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Downstream view of primary spillway



Photo 18 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Downstream slope of left dam



Photo 19 Dam ID# 199-0282 Chazy Lake Dam 08/15/2019
Upstream of primary spillway