Fletcher, Tony

From:

Fletcher, Tony

Sent:

Friday, May 08, 2015 10:06 PM

To:

Ayotte, Tara; Taylor, Dan

Cc:

Hyland, Mark

Subject:

RE: #105 Silver Lake Dam - HH - Bucksport - Inspection 5/8/15

Tara, Dan,

I inspected Silver Lake dam and its downstream watercourse today.

Condition Assessment;

The weather was fine and mild. The lake was close to the top of the steel bulkheads in the spillway. The road access gate from the left was locked but the dam is used as a path for pedestrians. The embankments were clear of grass and recently cut. Graffiti has been painted on the concrete spillway structure.

Defects noted;

- 1) Rutting along the of the top of the dam,
- 2) Seepage along the toe of the left embankment,
- 3) A steady leak at the base of the left concrete wing wall,
- 4) Uneven downstream areas near the top of the right embankment about 20 yards from the left concrete retaining wall.
- 5) Leaking central sluice gate.
- 6) Sediment in spillway cannel obscuring channel,
- 7) Crazing of the concrete wing walls,
- 8) Concrete cracking of the mass gravity spillway structure.

These defects have existed for many years, and although they appear benign and show little sign of development, they should not be taken lightly by the dam owner. My recommendation is that the dam owner inspect these defects regularly every 6 months, log observations and take action should any defect develop further.

Item 2 should be investigated and reported upon by an engineer specializing in embankment dams.

Tara, please send the dam owner a letter asking them for SQP's and to keep a log. If they want some engineers to contact, WP or MBP do a good job.

ģ

Hazard Assessment;

I followed the course downstream, went to the cutoff dike, and then looked at the saddle near the school where a breach flow may be diverted.

Points of note;

- 1) Silver Lake Dam must remain classified a high hazard dam because its failure could devastate the Town,
- 2) The dams saddle dike to the right of the dam dike needs a breach investigation,
- 3) The saddle area near the school needs to be investigated for overtopping,
- 4) The dam EAP should be updated asap.

Tony