Mr. Robert Adamek
Commission Chairman
Ashuelot Pond Village District
306 Coolidge Drive
Washington, NH 03280

July 10, 2012
Letter of Deficiency
DSP #12-056

RE: Ashuelot Pond Dam #245.05, Washington

NEW STATUTORY PENALTY PROVISIONS
PLEASE READ CAREFULLY

Dear Chairman Adamek:

The Department of Environmental Services, Dam Bureau (DES) is responsible for ensuring the safety of dams in New Hampshire through its dam safety program. One of the many tools that help us to reach this goal is our dam inspection program.

In accordance with RSA 482:12 and Env-Wr 302.02, an inspection of the subject dam was conducted on September 13, 2011. Based upon the results of that inspection, as well as upon additional investigation or analysis that may have been conducted, DES is issuing this Letter of Deficiency (LOD) to advise you that it believes the following deficiencies can be remedied in accordance with the deadlines indicated:

On a Continuing Basis:

1. Monitor the leak near the right side of the gate section of the dam (See photos H-J);
2. Monitor the condition of the secondary spillway to assure it is free-flowing and not blocked by debris;

By October 31, 2012:

3. Prepare the enclosed Operations, Maintenance, and Response form (OMR) and return it to the Dam Bureau;
4. 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 DES. The report should include all investigation findings and include recommendations and a schedule for repair, as warranted, to make the dam compliant with the current standards for Significant Hazard dams:

    A. Assess the hydrology of the watershed to determine if the dam is capable of safely passing the runoff from the 100-year storm event or the inflow design flood with a minimum of one foot of remaining freeboard and without manual operations. The inflow design flood is the flood flow above which a failure of the dam causes no incremental damages consistent with the dam's current hazard classification;

    B. Prepare a revised breach analysis using the data gathered in item (a), above in the event that the 100-year storm is different than that used for the breach analysis in 1997. The breach analysis used a number of 2525 cfs for the base flow of a 100-year storm, which is from the old Kinnison-Colby inflow hydograph;

*** Env-Wr 403.03 of DES's dam safety regulations requires consultants to have a minimum of 5 years of engineering experience related to the design and construction of similar dam projects, as determined by the department after a review of the engineer's resume.

5. Level and re-seed the crest of the dam so that it is consistent in elevation in all areas and well-vegetated (See photos B-G);
6. Remove the brush and trees from the upstream and downstream faces of the dam (See photo A, H, K, L, M, N, O, and P);
7. Remove the brush and trees from the left spillway abutment of the primary spillway and left end of the dam to a distance of 15 feet surrounding the left spillway abutment (See photos Q-S);
8. Since actual events have shown that an overtopping failure of the Village Pond Dam can be reasonably expected to occur during a failure of the Ashuelot Pond Dam under certain conditions, this should be added to the EAP for this dam. The EAP revision submitted April 18, 2012 should be updated to reflect this information, and should then be distributed and the notification flowchart tested in accordance with Env-Wr 507.01. The EAP should be tested every 4 years thereafter for a "Significant hazard" dam;

By May 31, 2013:

9. Submit to the Dam Bureau the results of the investigation/analyses requested in item #4, above, as well as any permit applications required. Any Inflow Design Flood (IDF) analysis can be included if utilized. The activity of modifying the outlet will likely require a formal permit from both the Dam Bureau and the Wetlands Program;

By December 31, 2014:

10. Reconstruct the dam, as necessary, in accordance with the permit issued as part of item #9, above, such that it meets the current requirements for Significant hazard dams; and
11. Submit deeds and/or property agreements to allow the APDVD to flow water through the primary and secondary spillways and to access and maintain all components of each, as appropriate.

Our intent in issuing this LOD is to make you aware of items that require your attention to ensure the continued safe operation of your dam. It is our hope that, through the return of the attached form and correction of the identified deficiencies, you will develop and maintain a commitment to keeping a safe and well-maintained dam.

Please note that effective January 1, 2009, significant changes to the penalty provisions of New Hampshire's dam safety statute (RSA 482) became effective. These changes require DES to commence proceedings to levy fines of up to $2,000 per violation per day against a dam owner who does not respond within 45 days of receipt of a written order, directive, or any notice of needed maintenance, repair, or reconstruction issued by DES. To avoid proceedings under this provision, you **must respond** to this LOD. We believe the easiest way to respond is to sign and return the attached "Intent to Complete Repairs" form, either agreeing to correct the identified deficiencies by the dates indicated OR by proposing amendments to the listed work items or dates, which you may do by writing directly on the form. DES will evaluate and respond to any reasonable requests for proposed amendments 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 damsafety@des.nh.gov or fax it to (603) 271-6120. **If you fail to return this form within 45 days or fail to otherwise respond in writing within 45 days indicating your intent to remedy the identified deficiencies, you will not have the benefit of the compliance deadlines indicated on the form and DES will commence a proceeding under RSA 482:89 to seek administrative fines for the identified deficiencies.** Please note that responding as required does not preclude DES from pursuing other appropriate action for the identified deficiencies, in accordance with the DES Compliance Assurance Response Policy, available on-line at http://des.nh.gov/organization/commissioner/legal/carp/index.htm.

If you have any questions or comments regarding this LOD or would like to be present at future inspections, please contact Brian Desfosses, P.E. at 271-3406 or write to the address for the Water Division listed on the bottom of the cover page.

Sincerely,

Steve N. Doyon, P.E., Administrator
Dam Safety and Inspection

Attachments: Dam Report, Photos, Drawing, Copy of 2008 OMR form and blank form for update, DB8, DB13
cc: DES Legal Unit
Town of Washington

Certified #_____

SND/BAD/was/h:/damfiles/24505/LOD/20120710 24505 LOD.doc

Intent to Complete Repairs
DAM #245.05/DSP #12-056
DAM Ashuelot Pond Dam

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

RE: Letter of Deficiency: Issued on July 10, 2012

Dear Dam Safety Program:

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

DATE: On a Continuing Basis

1. Monitor the leak near the right side of the gate section of the dam (See photos H-J);
2. Monitor the condition of the secondary spillway to assure it is free-flowing and not blocked by debris;

DATE: October 31, 2012

3. Prepare the enclosed OMR form and return it to the Dam Bureau;
4. 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 DES. The report should include all investigation findings and include recommendations and a schedule for repair, as warranted, to make the dam compliant with the current standards for Significant Hazard dams.
    1. Assess the hydrology of the watershed to determine if the dam is capable of safely passing the runoff from the 100-year storm event or the inflow design flood with a minimum of one foot of remaining freeboard and without manual operations. The inflow design flood is the flood flow above which a failure of the dam causes no incremental damages consistent with the dam's current hazard classification.
    2. Prepare a revised breach analysis using the data gathered in item (a), above in the event that the 100-year storm is different than that used for the breach analysis in 1997. The breach analysis used a number of 2525 cfs for the base flow of a 100-year storm, which is from the old Kinnison-Colby inflow hydrograph.

    *** Env-Wr 403.03 of DES's dam safety regulations requires consultants to have a minimum of 5 years of engineering experience related to the design and construction of similar dam projects, as determined by the department after a review of the engineer's resume.

5. Level and re-seed the crest of the dam so that it is consistent in elevation in all areas and well-vegetated (See photos B-G);
6. Remove the brush and trees from the upstream and downstream faces of the dam (See photo A, H, K, L, M, N, O, and P);
7. Remove the brush and trees from the left spillway abutment of the primary spillway and left end of the dam to a distance of 15 feet surrounding the left spillway abutment (See photos Q-S);
8. Since actual events have shown that an overtopping failure of the Village Pond Dam can be reasonably expected to occur during a failure of the Ashuelot Pond Dam under certain conditions, this should be added to the EAP for this dam. The EAP revision submitted April 18, 2012 should be updated to reflect this information, and should then be distributed and the notification flowchart tested in accordance with Env-Wr 507.01. The EAP should be tested every 4 years thereafter for a "Significant hazard" dam;

DATE: May 31, 2013

9. Submit to the Dam Bureau the results of the investigation/analyses requested in item #4, above, as well as any permit applications required. Any Inflow Design Flood (IDF) analysis can be included if utilized. The activity of modifying the outlet will likely require a formal permit from both the Dam Bureau and the Wetlands Program;

DATE: December 31, 2014

10. Reconstruct the dam, as necessary, in accordance with the permit issued as part of item #9, above, such that it meets the current requirements for Significant hazard dams; and
11. Submit deeds and/or property agreements to allow the APDVD to flow water through the primary and secondary spillways and to access and maintain all components of each, as appropriate.

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). DES 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 damsafety@des.nh.gov 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 DES initiating a proceeding to seek an administrative fine against you.

Signature of Owner:_____

_____(print name) Date:_____