Georgia Department Natural Resources

205 Butler Street, S.E., East Floyd Tower, Atlanta, Georgia 30334 Lonice C. Barrett, Commissioner Harold F. Reheis, Director **Environmental Protection Division**

bruary 2, 1998

Big Canoe Property Owners' Association % Mr. Troy Ledbetter Wolf Scratch Village Big Canoe, GA 30413

FILE CO

SUBJECT: Lake Petit Dam Pickens County

Dear Mr. Ledbetter:

On January 27, 1998 a meeting was held to discuss the status of this project and the future direction. Those in attendance, besides yourself, included: Mr. Mark Kilby, Jordan, P.E., Jones and Goulding: Mr. Tom Robertson, P.E., Cranston, Robertson, Whitehurst; Mr. Karl Myers, P.E., Piedmont Geotechnical Consultants; Mr. Bill Byrne, the developer; and Mr. John Bangus, P.O.A. Board.

The work performed up to this point was discussed. Two pizeometers have been installed on the dam. The data from these pizeometers, along with other available data, have been reviewed and analyzed. Using some basic assumptions, it appears the dam currently has a steady-state safety factor of around 1.28 and a seismic safety of .75. Neither of these meet the current required minimum safety factors as outlined in the Rules for Dam Safety.

The most likely solution to address the stability and wet slope issues will be the addition of a berm on the downstream slope. A site specific study will be conducted to determine a more accurate seismic coefficient. This will take approximately six to eight week with confirmation of a valve in about five weeks. Final design details can be established once this value is set.

It is estimated that it will take up to eight weeks to develop the plans. Due to the current work load and staffing level of the Safe Dams Program, it was discussed that approved plans would not come until the fall making construction in 1998 unfeasible.

I have discussed this situation with my program manager, Ed Fiegle. We are concerned about the dam not meeting the stability requirements especially in view of the size of this dam. Therefore, we believe every effort must be made to address this issue as soon possible. The Safe Dams Program will give this project top priority once it is submitted. Our desire is to review and approve the plans so that construction will occur in 1998.

There are a number of factors that could make construction in 1998 impossible. We are hopeful that these can be worked through. If construction in 1998 appears unlikely, then all interested parties will need to meet to discuss the options. The Safe Dams Program is not comfortable with the dam continuing in its current condition for at least another year. This issue will have to be adequately addressed if construction is not done in 1998.

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Our office looks forward to working with everyone on this project. If you have any questions, please feel free to call our office at 404/362-2678.

Sincerely,

Dallon Thomas Woosley, P.E. Principal Environmental Engineer

Safe Dams Program

DTW:kf

cc:

Jordan, Jones and Goulding % Mr. Mark Kilby, P.E.

Piedmont Geotechnical Consultants % Mr. Karl Myers, P.E.

Cranston Robertson Whitehurst % Mr. Tom Robertson, P.E.