

# Georgia Department of Natural Resources

205 Butler Street, S.E., East Floyd Tower, Atlanta, Georgia 30334

Lonice C. Barrett, Commissioner

Harold F. Reheis, Director

Environmental Protection Division

August 25, 1998

**FILE COPY**

Big Canoe Property Owners Association  
% Mr. Troy Ledbetter  
Wolfscratch Village  
Big Canoe, GA 30143

**SUBJECT:** Lake Petit Dam  
Pickens County

Dear Mr. Ledbetter:

This letter is a summary of our meeting on August 19, 1998. The meeting was requested by Mr. Neil Davies of GeoSyntec Consultants (GeoSyntec). The following items are not in any particular order.

Representatives of the Big Canoe Property Owners Association (POA) opened the meeting by explaining that they want to look at alternatives. There are concerns with the current design and these include environmental impact, the need to relocate the road, the loss of the ball field, and traffic safety during and after construction. The plan is to still comply with a construction start date of April 1, 1999. It was stated that there are several financing options available and these will be pursued once a price is known.

- GeoSyntec has been retained by POA to review analyses performed to date and to work with Jordan, Jones & Goulding (JJG) and Piedmont Geotechnical Consultants (PGC) to identify the best solution.
- Representatives of JJG and PGC were not present at this meeting. Mr. Davies indicated that Mr. Myers, P.E. with PGC had been invited but was out of town all week.
- GeoSyntec is to submit their credentials with respect to dams.
- The role of GeoSyntec, JJG, PGC, and Mr. Tom Robertson, P.E. was discussed. The lead designer will be based upon which alternative is selected.
- The areas of concern with this dam are:
  - the seepage
  - steady-state stability
  - seismic stability
- The work performed by JJG and PGC is being reviewed by GeoSyntec.
- The current evaluated factors of safety for this dam are 1.28 (1.5 minimum required) for steady state and .75 (1.1 minimum required) for seismic.
- GeoSyntec is investigating the possibility of utilizing a USACOE approach to redefine the seismic acceleration.
- A factor of safety of 1.1 must be used on the seismic as opposed to 1.0 as used by USACOE.
- The Safe Dams Program will need to retain an outside consultant to review work done using the Makdisi-Seed and other methods that we are not familiar with. This will impact the overall review time and schedule.

