

designed to be protective of aquatic life and describe how the sampling will ensure water discharge permit compliance.

Response: The explanation has been revised to state that NPDES discharge limits are designed to be protective of aquatic life. Additional detail regarding sampling parameters and frequency has been added.

5. Technical Response to Review Comments Provided by State Geologist & Supporting Documents Comments by: James L. Kennedy, Ph.D., P.G.

Response: TPM responses to comments 5a through 5h will be submitted under separate cover upon completion of our revised groundwater model and additional laboratory leaching test.

6. Subsurface Continuity of Humate-Bearing Sands in the Surficial Aquifer, Trail Ridge, Georgia Comments by: James L. Kennedy, Ph.D., P.G.

Response: TPM responses to comments 6a through 6c will be submitted under separate cover upon completion of our revised groundwater model.

7. Groundwater Withdrawal Permitting Application Comments by: Bill Frechette and John Ariail

- a. *Twin Pines submitted a revised application dated 12-09-2020, requesting a new groundwater withdrawal permit to withdraw up to 1.440 mgd from two wells in the Floridan aquifer.*

Response: Agreed – no response required.

- b. *In Section 6 – page 14 of the application and Table 2 – page 9 of attachment B (“An evaluation of drawdown from Floridan wells”) lists three scenarios for the total drawdown of the Floridan aquifer at the edge of the Okefenokee National Wildlife Refuge (ONWR), based on pumping two wells at 500 gpm for 4 years.*

“The maximum drawdown of the Floridan Aquifer at the edge of the ONWR is 3.8 ft in the Base Case Scenario, 13.2 ft for the Maximum-Drawdown Scenario, and 1.3 feet for the Minimum-Drawdown Scenario.”

The application does not quantify the impact to the Surficial aquifer at the edge of the ONWR, as a result of the Floridan aquifer “Maximum-Drawdown Scenario” listed above. Please provide further analysis / detailed modeling to quantify the surficial aquifer drawdown at the edge of the ONWR, based on the Floridan aquifer drawdown numbers provided in the application. This may require a more detailed modeling of the drawdown in the Floridan aquifer, and its associated impact to the Surficial aquifer.

Response: TPM performed additional analysis to quantify the impact to the surficial aquifer at the edge of the ONWR as a result of the Floridan Aquifer “Maximum-Drawdown Scenario.” The results of the analysis show that the drawdown of the Surficial Aquifer at the edge of the ONWR is essentially zero. A detailed description of the analysis performed, entitled, “Analysis of Impacts to Surficial Aquifer” is provided in Attachment B of this document.