

excavation is not expected except under conditions specified in the permit application. Paragraph 3 further says that excavation will be continuous, during wet and dry conditions. The top of Page 2 of the Monitoring and Adaptive Management Plan prepared by TTL on 13 November 2020 says that the water table at the proposed mine site is very shallow, with water depths of only a few feet. Page 5 Paragraph 3 of the Soil Amendment Plan says that the pit will be backfilled to a level approximately 10 feet below the original land surface and that the blended sand/bentonite material will be placed at a level/interval of 7 to 10 feet below the original land surface. Based on what was said in the Adaptive Management Plan it would be expected that the level/interval of 7 to 10 feet below the original land surface would be below the water table in the un-dewatered mine excavation. The soil amendment plan needs to explain how the blended sand/bentonite material will be placed at a level/interval of 7 to 10 feet below the original land surface below the water table in the mine excavation in a manner that does not allow the bentonite to separate from the sand, or explain how the mine excavation will temporarily be dewatered to allow placement of the blended sand/bentonite material.

Response: Because the sand/bentonite mixture is very cohesive, it can be cast into the open pit whether it is wet or dry, without separating. Because backfilling will occur within 500 feet of the leading edge of the drag line, groundwater will not have time to completely fill the pit, and most water will be absorbed by the tailings material, which will be very dry and absorbent (Sheet 8 – Section 1.1., 5th Bullet).

- e. *The Soil Amendment Plan has no provision for monitoring of groundwater levels in the reclaimed mine. The Soil Amendment Plan must propose a groundwater level monitoring plan such as that shown by the proposed piezometer locations shown on Figure 9 in the Monitoring and Adaptive Management Plan prepared by TTL on 13 November 2020. Monitoring of groundwater levels must be conducted monthly until groundwater levels are within one foot of groundwater levels shown on Figure 3 of the Monitoring and Adaptive Management Plan. After groundwater levels reach within one foot of groundwater levels shown on Figure 3 groundwater levels may be measured once every six months. The Soil Amendment Plan must include a contingent plan in case groundwater levels in the reclaimed mine are not restored to within one foot of groundwater levels shown on Figure 3. Such a plan may involve installation of a low hydraulic conductivity layer by the injection of bentonite slurry to a level/interval of 7 to 10 feet below the original land surface in closely spaced borings. Other engineered solutions may be feasible. The contingent plan must not be implemented without prior approval from the Georgia Environmental Protection Division.*

Response: The groundwater-level monitoring plan is addressed on Sheet 10, and a reference has been added to the Soil Amendment Plan.

Regarding restoration objectives, TPM respectfully requests that EPD consider an alternative to the target requiring groundwater levels be restored to within a foot of the level measured on a specific date in history. Any such target would be arbitrary and difficult to achieve because groundwater levels vary naturally by more than a foot over both space and time. As an alternative, TPM suggests requiring groundwater levels to be restored to a groundwater “normal” that accounts for natural seasonal and climatic