alternative mining method consists of utilizing open pit mining using excavator/dozer trap mining technique on the entire site as opposed to the applicant's preferred mining method utilizing dragline mining technique.

In this mining method, the topsoil is removed with earth moving equipment and stockpiled for later use in reclamation. The excavator/dozer trap method is utilized to mine shallower depths. This method has a limited reach, depending on the machine. It also has a lower excavation and production rate. There is more frequent relocation of the machine which results in lost production due to the relocation time. The mining process proceeds as follows: The mining unit (excavator/backhoe/dozer trap) will mine the material. The mining unit will feed a screen. The screen material feeds a pit/feed conveyor system. The oversized/organic material will be placed near the screen area for future deposit during the reclamation process. The pit/feed conveyor system feeds a mainline feed conveyor system. The mainline feed conveyor system will incline (or feed a stacker conveyor) and then feed the trommel. The trommel feeds the PCP.

In the PCP, spiral centrifuges concentrate and separate the heavy mineral sands from the lighter clays and quartz sand and then feeds the WCP. The WCP further reduces and separates the material for processing. The material from the WCP is transported to the MSP. The MSP separates valuable and non-valuable mineral products such as zircon, staurolite, rutile, ilmenite, etc. After products have been separated, the final products will be containerized, bulk shipped or loaded on rail dependent upon customer requirements.

The tailing from the PCP/WCP area will be temporarily stockpiled. Tailing will be loaded onto the mainline tails conveyor system. The mainline tails conveyor system will convey material onto a reclamation conveyor. The reclamation conveyor deposits the tailings back into the mined pit area for reclamation.

As part of reclamation the tailings are transported from their stockpiles to the open mined area where they are deposited. The areas are then recontoured, covered with topsoil and revegetated to meet reclamation standards. The operation is a continuous process and while the equipment is operating, backfilling of the pit is occurring as well once the operation gets under way.

The northern boundary of the Alternative 3 site is located approximately 3.73 miles from the nearest boundary of the Okefenokee Swamp National Wildlife Refuge, providing a substantial buffer of protection for this sensitive resource. Alternative 3 is comprised of suitable reserves of heavy mineral sands containing the target minerals suitable for mining. The heavy mineral sands underlying the site are comprised of an average of 2% concentration of the economically viable minerals; however, due to a maximum depth of 25 feet the mining method does not allow for proper extraction which would not allow the applicant to meet the requirements of its contracts with customers to supply the amount of heavy mineral sands required. The location of Alternative 3 is within reasonable 50-mile proximity to the Jacksonville Port. Public services and facilities required to support the mine and protect public health, safety and the environment are available. Alternative 3 does contain direct rail access which links to the port of Jacksonville. As a result, the cost of handing/transportation of materials is reduced. The implementation of Alternative 3 is expected to have a beneficial economic impact on the adjacent community due to its projected employment of 150-200 people for 8 years.

The implementation of Alternative 3 would result in the discharge of less cubic volume of dredge and fill in wetlands and streams, but would not affect the overall acreage impacted. This volume reduction is due to the reduced mining depth.

Alternative 3 provides habitat for the federal candidate, state listed threatened gopher tortoise and federal candidate, state rare gopher frog. Gopher tortoise and gopher frog will be relocated for the duration of the project and then reintroduced to the site upon completion of the mining activity. With