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According to Twin Pines, mining Loncala or Alternative 2 is impracticable <sup>135</sup> because it is roughly 3 miles from a rail line, requiring longer material transport and "[cost] would increase as a result." <sup>136</sup> But, "the fact that an alternative might have some unquantified higher operating cost" does not mean the alternative is not practicable. <sup>137</sup> Moreover, given Twin Pines' purchase of the Loncala site and inclusion of it in the 12,000 acre project area, it appears that Twin Pines intends to mine the site in the future. <sup>138</sup>

Alternative 3 exemplifies the artificially narrowed scope of Twin Pines' analysis. In this scenario Twin Pines would use the 25-foot deep excavator/dozer mining method (that it proposes to use on 216 acres in its preferred plan) on the entire Phase One site. This alternative supposedly does not extract enough material to "allow the applicant to meet the requirements of its contracts with customers to supply the amount of heavy mineral sands required." The Corps may not consider Twin Pines' "landowner commitments" or the contracts they signed prior to the permitting process. To do so would allow a permit applicant to sidestep the entire alternatives analysis. 141

Alternatives 4 and 5 would mine only the upland areas of the Loncala and Phase One sites, respectively. For Phase One, Twin Pines fails to explain why it must mine 522 acres of wetlands. We are unaware of any other heavy mineral sands mine in Georgia that requires such a blunt instrument. Alternative 5 again improperly refers to Twin Pines' prematurely-inked contractual obligations as the reason this alternative is impracticable, yet even if that were an appropriate consideration, there is no discussion of what could be cost-effective: why not mine only 500 acres of wetlands? That is, Alternative 5 presents a false dilemma between mining all or none of the waters sitting on heavy minerals. Twin Pines' lack of analysis on this point is further described in the section on Avoidance below.

<sup>&</sup>lt;sup>135</sup> Application at 15.

<sup>&</sup>lt;sup>136</sup> Application at 8. Twin Pines fails to provide any support for its assertion that construction of a rail spur would necessarily result in more aquatic impacts.

<sup>&</sup>lt;sup>137</sup> Delaware Riverkeeper Network v. United States Army Corps of Engineers, 869 F.3d 148, 159–60 (3d Cir. 2017). Further, "significant additional cost can prove determinative, in and of itself, only if the competing alternatives can reasonably be viewed as equivalent with respect to other factors." Friends of the Earth v. Hall, 693 F. Supp. 904, 946–47 (W.D. Wash. 1988) (emphasis added).

<sup>&</sup>lt;sup>138</sup> We have heard that Twin Pines' pending groundwater modeling does not cover the Loncala Tract. If it did, the tract's proximity, less than half a mile, to the Okefenokee could make a difference in the analysis of aquatic resource impacts which is so lacking in the current application; perhaps due to Twin Pines' intent to mine the Loncala Tract in future phases of the project.

<sup>&</sup>lt;sup>139</sup> *Id.* at 10. Miraculously, this alternative where Twin Pines cannot mine enough material to meet its contracts also has a "projected employment of 150-200 people for 8 years." *Id.* 

<sup>&</sup>lt;sup>140</sup> *Id.* at 3.

<sup>&</sup>lt;sup>141</sup> Cf. 33 C.F.R. Pt. 325, App. B(9)(b)(4); 33 C.F.R. § 320.4(q).