

Figure 3: South Georgia/North Florida Heavy Mineral Sands Mining

The feasibility of mining at least sections of the Penholoway Terrace has been demonstrated by other mining operations through the years, as shown in the map above.¹³⁰

Twin Pines hand-waves away these “considerable resources” based on such impenetrable criteria as “the social and economic impacts of a proposed facility on the affected community” (which it does not even include in its summary chart on page 15 of the Application) and “the costs and availability of public services, facilities and improvements required to support a proposed facility and protect public health, safety and the environment” (which things are never explained).¹³¹ Twin Pines also complains that “much of the modern coastal areas are covered by infrastructure [and] land-use and permitting considerations may limit mineral development”¹³² Yet, the mere presence of infrastructure in the area does not make a site impracticable, rather two of Twin Pines’ own criteria (rail and port proximity) are “infrastructure.”

The law on this point is clear: an applicant cannot use overly narrow site selection criteria to preclude otherwise practicable alternatives from consideration.¹³³

2. The on-site alternatives analysis is inadequate.

The so-called analysis that Twin Pines did conduct is riddled with inconsistencies, unsupported statements, and slight analysis. The company reviewed two tracts within the larger 12,000-acre site: the proposed Phase One site and the Loncala tract.¹³⁴ Twin Pines ignores the middle 9,000 acres of the “project study area,” offering zero discussion or explanation of the omission.

¹³⁰ From North to South on the Penholoway Terrace: Iluka Resources’ Lulaton Mine operated from 2004 to 2006. Southern Ionics is currently operating two sites near Nahunta and Winokur. And Humphrey’s Mining Company mined out a deposit northeast of Folkston from 1965 to 1974 before moving its equipment across the state line to Boulogne (1974 to 1979)—both operations on behalf of DuPont. Maria Mange and David Wright, Eds., *HEAVY MINERALS IN USE*, at 1170; see also PR-8: South Georgia Minerals Program: Heavy Mineral Bearing Sand, Coastal Region Georgia (1967), available at <https://epd.georgia.gov/georgia-geologic-survey-guides-and-reports>; B-120, Pirkle, et al. “Heavy Mineral Deposits of the Southeastern Atlantic Coastal Plain,” at 21 (1984), available at <https://epd.georgia.gov/georgia-geologic-survey-bulletins> (referring to the Folkston, Bolougne, and Green Cove Springs deposits as being located on the “Duval Upland”). Iluka Resources’ Green Cove Springs Mine operated, under various owners, from 1972 until 2016. Amelia A & B Mines near Jesup are owned by Chemours, have been permitted, but have not begun mining operations. DuPont, now Chemours, have operated along Trail Ridge south of the St. Marys River since the 1940s.

¹³¹ Permit Application at 4.

¹³² Permit Application at 4.

¹³³ See *National Wildlife Federation v. Whistler*, 27 F.3d 1341, 1346 (8th Cir.1994); *Sylvester v. U.S. Army Corps of Engineers*, 882 F.2d 407, 409 (9th Cir. 1989); *Fla. Clean Water Network, Inc. v. Grosskruger*, 587 F. Supp. 2d 1236, 1244 (M.D. Fla. 2008).

¹³⁴ The Loncala Tract is the northernmost tract owned by Twin Pines on Trail Ridge.