

U.S. Fish and Wildlife Service's Responses to Questions from Senator Perdue Regarding the Proposed Twin Pines Mining Project

Project Description Overview:

The letter states "As currently proposed, the mine site is approximately 12,000 acres with the northwest boundary within ½ mile from the Okefenokee NWR boundary and 400 ft. from the edge of Okefenokee Swamp and north and west of the St. Mary's River. The initial project location will be 1.7 miles southeast of the Okefenokee NWR boundary. Operationally, dredging of targeted material (titanium and Zirconium) will extend on average to a depth of 50 foot could reach a depth of to 100 feet. The first mining phase has a proposed project area of 2,414 acres. The rate of mining will be approximately 25-40 acres per month, and backfilled and graded with approximately 30 days following excavation."

- **Question 1:** It was our office's understanding that Twin Pines currently owns/leases about 9,500 acres and that the 12,000 acres was the area utilized as a study area for the mining project. Could you confirm this?

Response: The U.S. Army Corps of Engineers (USACE) Joint Public Notice SAS-2018-00554 (available at: [https://www.sas.usace.army.mil/Portals/61/docs/SAS-2018-00554-Charlton-0712-SP%20\(HAR\).pdf?ver=2019-07-12-160626-380](https://www.sas.usace.army.mil/Portals/61/docs/SAS-2018-00554-Charlton-0712-SP%20(HAR).pdf?ver=2019-07-12-160626-380)) states that Twin Pines is proposing to operate a mining facility for the extraction of heavy minerals "on approximately 12,000 acres comprised of six different tracts." The U.S. Fish and Wildlife Service (Service) cannot confirm the location of mining operations and any agreements with private landowners, and we defer to USACE and/or Twin Pines on this matter.

- **Question 2:** It was our office's understanding that while the proposed permit area is around 2,400 acres, Twin Pines intends to mine about 1,200 acres. Can you confirm this?

Response: According to the Joint Public Notice, the area will be mined in phases. The first mining phase is the currently proposed project area of 2,414 acres, of which approximately 1,200 acres is proposed to be mined. Future mining phases within the 12,000-acre area may occur in adjacent or nearby portions of this sand ridge that impounds the Okefenokee Swamp known as Trail Ridge.

- **Question 3:** It was our office's understanding that while the proposed permit area is around 1.7 miles away from the Okefenokee NWR boundary, the actual mining area is 2.7 miles from the Okefenokee NWR. Can you confirm this?

Response: Yes. The initial project location is the farthest that mining activity would be from the Okefenokee National Wildlife Refuge (NWR) boundary and the Okefenokee Swamp. Any additional mining that occurs within the 12,000-acre permit area would be closer to the refuge. The northwest boundary of the permit area is within a half mile from the refuge boundary and 400 feet from the edge of the Okefenokee Swamp.

- **Question 4:** If the 2.7 miles number is correct, does Fish and Wildlife have any available research that shows that the Twin Pines mining project will have an impact on the water levels of the Okefenokee Swamp?

Response: Research is not available at this time. It is the responsibility of the permit applicant to demonstrate what the extent of impacts of the project will be to surrounding natural resources.

At this time, the Service cannot fully evaluate the hydrologic, hydrogeologic, and geologic characterization information and data because Twin Pines has not fully released its findings. The Service received two of three draft reports on November 1, 2019, and the third report is forthcoming. At this time, we can only evaluate what the Twin Pines geologist has presented at various meetings. He has stated that there will be an impact but to what extent is unknown. At one presentation, he indicated that impacts would not be felt for 38 years, which indicates that there would be an effect.

- **Question 5:** It was our office's understanding that backfilling would occur within 5 to 10 days of excavation, not 30 days. Can you confirm this?

Response: The Joint Public Notice states, "Each phase will be mined at approximately 25-40 acres per month and backfilled and graded within approximately 30 days following excavation."

Gopher Tortoise

The letter states that "While not listed as threatened or endangered under the ESA in Georgia, the gopher tortoise is a candidate species."

- **Question 6:** Does being designated a candidate species require the same protections as being listed as threatened or endangered under the ESA?

Response: No. The Service, its federal and state agency partners, and private landowners are actively working to enhance and preserve habitat such that listing under the Endangered Species Act is not necessary in this portion of the range. The Service has been asking action agencies and applicants to voluntarily provide conservation for the species, particularly in areas with viable populations and/or the potential to support viable populations.

Eastern Indigo Snake

- **Question 7:** If no indigo snakes have been observed on the proposed mining site, is there a certain standard or confidence level the FWS utilizes to assess the possibility of occurrence of a particular species?

Response: The threatened eastern indigo snake has extensive home ranges that are generally in excess of 1,000 acres. The large snake commonly moves through areas 1-3 miles from known locations. The eastern indigo snake has not been reported from the parcel currently proposed for mining but is known to occur in nearby locations, including

Okefenokee NWR. If suitable habitat is present on a proposed project site that is within 1-3 miles of documented occurrences, the Service assumes some likelihood of occasional presence within the project area. Though a biological opinion has not been prepared for this project, we are likely to assume presence for the proposed project and provide the action agency and/or applicant with measures as to avoid or minimize the likelihood of “incidental take” of the snake.

General Questions

- **Question 8:** It was our office’s understanding that Chemours (formerly Southern Ionics) has been mining in the same general vicinity for many years. Has the Chemours project had a significant impact on any fish or wildlife in the area?

Response: To date, no federally listed species are known to have been impacted by Chemours mining activities. However, based on a recent report and in coordination with Georgia Department of Natural Resources, 1,332 gopher tortoise burrows have been impacted by mining activities. During the mining period, 336 gopher tortoises have been captured and relocated to nearby conservation areas. To date, no eastern indigo snakes have been captured and translocated.

For additional context, Chemours Southern Ionics Mission Site is located on the sand ridge to the east of Trail Ridge known as the Penholoway Shoreline. The area available to mine is small compared to Trail Ridge, and they are only taking minerals from the top 25 feet of soil. The Mission Site is adjacent to a wetland and the Satilla River. These components of the Mission Site are notably different than what is being proposed by Twin Pines (e.g., mining an average of 50 feet deep on Trail Ridge, going to elevations below the basin topography of the Okefenokee Swamp).

- **Question 9:** Similarly, how close was the proposed DuPont mining project to the Okefenokee Swamp in comparison to the Twin Pines proposed project?

Response: The DuPont mining project extended from Sawfly Road to the south boundary of Toledo Manufacturing’s land, almost the entire eastern edge of the Okefenokee Swamp. The proposed site was directly adjacent to the swamp and parts of the refuge boundary. It was a comparable distance from the swamp as the Twin Pines proposed Alternative 2 site, which is part of the 12,000-acre permit area that is eventually planned to be mined.

- **Question 10:** What is Fish and Wildlife’s jurisdiction with regards to the Twin Pines mining project? If there are no federal protected species on the proposed site, does that jurisdiction still apply? Are hydrology impacts included in that jurisdiction?

Response: The Service, along with NOAA Fisheries, is responsible for administering the Endangered Species Act (ESA). Under Section 7(a)(2) of the ESA, federal agencies are required to consult with the Service to ensure that their actions do not jeopardize the

continued existence of a listed species or adversely modify its critical habitat that the species needs to recover. Since Twin Pines is seeking a permit under section 404 of the Clean Water Act, the USACE will need to determine potential effects to any listed species and then will work with the Service through the consultation process to avoid or minimize impacts to listed species and critical habitat by developing appropriate conservation measures that can be incorporated into the project or, if needed, a biological opinion.

In addition to the ESA, the Service may review, comment, and coordinate on projects under the National Environmental Policy Act and the Fish and Wildlife Coordination Act (FWCA). Under the FWCA, the Service is responsible for requesting, summarizing, and submitting comments from state and other federal agencies describing potential project level impacts by the proposed activities. These comments are not restricted to ESA concerns and generally focused on potential impacts to habitats and ecosystem processes.