



March 20, 2023

Submitted electronically via email to twinpines.comment@dnr.ga.gov

Land Protection Branch
4244 International Parkway,
Atlanta Tradeport - Suite 104
Atlanta, GA 30354

RE: Comment Opposing Draft Mining Land Use Plan submitted by Twin Pines Minerals, LLC for Strip-Mining Near Okefenokee National Wildlife Refuge

Friends of Animals submits this comment in opposition to the Draft Mining Land Use Plan (MLUP) submitted by Twin Pines Minerals, LLC (TPM) for a proposed strip-mining operation in Charlton County, Georgia. The proposed operation is situated 2.9 miles from the Okefenokee National Wildlife Refuge (the “Refuge”), an ecological preserve that includes the Okefenokee Swamp (the “Swamp”).¹ Friends of Animals is a non-profit international advocacy organization incorporated in the state of New York since 1957. Friends of Animals has nearly 200,000 members worldwide. Friends of Animals, and its members, seek to free animals from cruelty and exploitation around the world, and to promote a respectful view of non-human, free-living and domestic animals and wildlife throughout the world. The protection of wildlife and wildlife habitats, both in the United States and abroad, is a critical tool in combating contemporary environmental issues, including the loss of biodiversity and the climate change crisis.

FACTUAL BACKGROUND

On January 19, 2023, the Georgia Department of Natural Resources, Environmental Protection Division, Land Protection Branch, issued its Notice for Opportunity for Public Comment related to Twin Pines Minerals’ (TPM) Draft Mining Land Use Plan (MLUP) for a proposed strip mine approximately 2.9 miles from the Okefenokee National Wildlife Refuge.² TPM is seeking a permit to engage in strip-mining on approximately 600 acres to extract earthen minerals, including titanium dioxide. While TPM claims that the extracted minerals are needed to promote national security, titanium dioxide is primarily used for

¹ <https://epd.georgia.gov/twin-pines> (Twin Pines Minerals, LLC Permitting Fact Sheet); Draft Mining Land Use Plan Summary dated January 19, 2023.

² Georgia Department of Natural Resources, Notice of Opportunity for Public Comment, January 19, 2023.

nonessential purposes unrelated to national security, such as whitening for toothpaste, pastries, cosmetics, and paint. Titanium dioxide can also be extracted from other locations that are not situated so closely to critical natural habitats.

The area in which the strip-mining is planned is Trail Ridge, a hydrological divide between the Refuge and the St. Mary's River that created the swamplands in the Refuge and serves as an "ancient dam." The Refuge consists of 358,981 acres of essential habitat for wildlife, birds, fish, and plant life. The Refuge was established to provide "refuge and breeding ground for migratory birds and other wildlife."³ There are over 620 species of plants growing in the swamp. Reported animals include 39 fish, 37 amphibian, 64 reptile, 234 bird, and 50 mammal species.⁴ The Refuge provides habitat for the American Alligator, as well as for threatened and endangered species, such as red-cockaded woodpeckers, wood storks, eastern indigo snakes, and the American eel. Birds include swallow-tailed kites, sandhill cranes, Bachman's sparrows, prothonotary warblers, red-shouldered hawks and barred owls. Reptiles include the gopher tortoise, timber rattlesnakes, Florida softshell turtles and numerous species of water snakes. Because of its global significance, the Refuge has been placed on a tentative list to be designated as a World Heritage Site.⁵

The vast acreage of the Refuge also contains the Okefenokee Swamp, a large area of "dark water" serving as a "carbon sink," a vital component in the battle against climate change as a source of storage and sequestration of carbon. The Swamp is the largest intact freshwater wetland in North America at a size of approximately 700 square miles.⁶ The Swamp is also designated a National Natural Landmark and protected specifically for its value in supporting and maintaining the populations of America's wildlife and their habitats.⁷ The Swamp is also a vital source of peatlands. Peatlands are essential in fighting climate change as they store and sequester double the amount of carbon that forests do, removing a significant contributing factor to climate change. One third of the carbon stored globally is found in peatlands. If peat is disturbed, not only is that vital storage resource removed, but the ancient carbon sequestered within the peatlands is released into the atmosphere.⁸ Because of the Swamp's importance and value on an international scale, the Refuge was designated as a Wetland of International Importance by the RAMSAR Convention in 1971.⁹

³ <https://www.fws.gov/refuge/okefenokee/about-us>.

⁴ <https://www.fws.gov/refuge/okefenokee/species>.

⁵ <https://www.fws.gov/refuge/okefenokee>.

⁶ <https://rivercenter.uga.edu/the-okefenokee-swamp/okefenokee-conservation>.

⁷ <https://rivercenter.uga.edu/the-okefenokee-swamp/okefenokee-conservation>.

⁸ Mark Mancini, "Swamps and Wildfires: A Dangerous Combination,"

www.science.howstuffworks.com/nature/natural-disasters/swamps-and-wildfires-dangerous-combination.htm (accessed March 15, 2023).

⁹ <https://www.fws.gov/refuge/okefenokee>.

Under the MLUP, TPM will engage in a strip-mining operation of approximately 600 acres a mere 2.9 miles from edge of the Refuge. The mining processes employed will disturb the hydrological landscape and have a direct effect on the water levels of the Swamp. In fact, just the first phase of the project will destroy over 300 acres of critical wetlands, pumping groundwater at a rate of 1,000,000 gallons per day, and lead to the inevitable discharging of pollution and destruction of habitat. It is only logical, and scientifically evident, that the water levels of the Swamp will be altered, causing an adverse effect on not only the immediate environment, but on a global scale as well. Friends of Animals urges the Department of Natural Resources to listen to the scientists that state that strip-mining will cause irreversible damage to the Refuge and the Swamp, and then deny the mining permit, just as the Army Corps of Engineers did in the past.

DISCUSSION

Pursuant to section 12-4-72 of the Official Code of Georgia Annotated (Surface Mining Act) and section 391-3-3 of the Rules for Surface Mining, anybody seeking to engage in strip-mining operations must first develop an MLUP “based upon sound engineering and conservation principles.” “Where a mining site is to be located on lands or adjacent to lands containing natural or other resources which may be adversely affected by the mining operation, the mining operator shall include as an attachment to the Mining Land Use Plan, a plan to alleviate and/or mitigate adverse effects of such impacts.” As is clear from the opinions many scientists have provided regarding TPM’s draft MLUP, “sound engineering and conservation principles” do not include mining operations and methods that will irreversibly damage critical wetlands. Damage that is irreversible and permanent cannot be alleviated or mitigated, as the damage is permanent once it takes place. Because the proposed strip-mining operations do not satisfy the statute, the Department of Natural Resources should decline TPM’s permit application.

Mining in the Trail Ridge region will require pumping of one million gallons of water per day, creating the real threat that water levels in the Swamp will be lowered. While the swamplands are protected from extraction operations of the surface waters within its boundaries, the proposed mine will tap into waters that are not in the actual boundaries of the Swamp, but are connected through a series of waterways and subterranean formations that serve as sources for the Swamp.¹⁰ As a result of lower water levels, the Swamp and the peatlands will be at risk of damage and possibly more susceptible to droughts. Experts at the University of Georgia, as well as the U.S. Fish and Wildlife Service, have cautioned about this possibly catastrophic outcome.¹¹

¹⁰ <https://rivercenter.uga.edu/the-okefenokee-swamp/okefenokee-conservation>.

¹¹ “Interior Secretary Urges Georgia Governor to Block Mining Plans Near Okefenokee,” Stanley Dunlap, <https://georgiarecorder.com/2022/12/08/interior-secretary-urges-georgia-governor-to-block-mining-plans-near-okefenokee> (accessed March 15, 2023).

Damage to the Swamp and the peatlands through the lowering of the water levels should alone be sufficient for the Department of Natural Resources to deny TPM's permit application. However, unfortunately, the potential for destruction is not confined to one possible source and is, in fact, multifaceted. Not only will mining operations lower the water levels, placing the Swamp and the peatlands at risk, but will also place the water system at the risk of introduction of harmful pollutants. Introduction of harmful pollutants will, without question, compromise the water system and endanger the species and habitats that are dependent on clean water sources.

While lowering the water level and introducing harmful pollutants into the water system will have a direct and local effect on the species and habitats in the immediate region, compromised health of the Swamp and the peatlands will also adversely affect their ability to store and sequester carbon. This will have an adverse effect on both a domestic and global scale, as the reduction of water levels will result in damage to the Swamp and the peatlands. The peatlands are a vital resource in storing and sequestering carbon and are critical in the battle against climate change. Peatlands sequester and store carbon at a rate twice that of trees and damage not only diminishes the ability to store and sequester carbon, but also releases the carbon being stored and sequestered.¹² While TPM may be attempting to mitigate or alleviate conditions locally, the irreversible effects are felt well beyond the immediate environment and will be seen globally as a hurdle in the fight against climate change.

Lowering the water level and damaging the peatlands also places the region at a greater threat for fire damage. As the climate changes and the Earth warms, we have seen more frequent, hotter, and intense wildfires burning. Damage to the swamplands and the accompanying peatlands can result in a release of sequestered carbon. As a result, the immediate environment becomes dryer and more susceptible to fires, which will release carbon into the atmosphere, and the cycle continues. In fact, the Okefenokee Swamp has had numerous fires in its history and may sustain fires at a greater frequency in the future if the water level is lowered and the peatlands are further damaged.¹³ The best way to limit such susceptibility to fires is to limit lowering of the water level, protect the Swamp and the peatlands, and deny TPM's permit for strip-mining near this critical resource and habitat.

TPM's history of environmental violations also weigh in favor of denying the permit. TPM, an Alabama-based mining company, has a long history of polluting the air of local communities in northeast Georgia, killing thousands of fish in Georgia waterways, violating

¹² <https://rivercenter.uga.edu/the-okefenokee-swamp/okefenokee-conservation/>.

¹³ "Swamps and Wildfires: A Dangerous Combination," Mark Mancini, www.science.howstuffworks.com/nature/natural-disasters/swamps-and-wildfires-dangerous-combination.htm (accessed March 15, 2023).

air quality safeguards in North Carolina, illegally discharging mining waste into Florida wetlands and operating without a permit in Florida.¹⁴ Additionally, in the absence of a county permit and comment period, the company illegally bulldozed and graded land for its draglines, facilities and mining equipment.¹⁵ Without saying that TPM will act in a similar manner with the proposed MLUP on Trail Ridge, it is important that the Division of Natural Resources understand all potential consequences of permitting strip-mining, including the potential for adverse effects of TPM's mining practices.

CONCLUSION

Friends of Animals thanks the Department of Natural Resources for the opportunity to comment on the proposed strip-mining operations adjacent to the Refuge. The Refuge and Swamp are cherished environmental habitats that are critical for a strong biodiversity and a vital tool in the battle against climate change. Damage to the region is not just minor condition suffered at a local level, but an irreversible condition with adverse consequences to the species inhabiting the area, humans that live and enjoy the area, and the larger environment on a global scale. This region is critical carbon capture, absorption, and storage, and must be protected from the damage caused by strip-mining. There are no mitigation measure that can change damage that which is irreversible, and Friends of Animals requests that the Department of Natural Resources deny the permit application.

Thank you for the opportunity to comment, and please contact me if you have any question or concerns.

Sincerely,
Rob Huss
Senior Attorney
Friends of Animals
Wildlife Law Program

¹⁴ <https://defenders.org/blog/2021/08/twin-pines-minerals-incompetent-or-knowingly-unlawful>; Beau Evans, Rural NE Georgia wood-fired plants leave nearby residents with bad taste, Georgia Reporter (Nov. 20, 2019); Letter from N.C. Dept. of Envtl. Quality to Steven Ingle, North Carolina Renewable Power (Nov. 16, 2016); Florida Dept. of Envtl. Prot. v. Chemours, OCG File No. 18-1240, Consent Order (Feb. 7, 2019).

¹⁵ <https://defenders.org/blog/2021/08/twin-pines-minerals-incompetent-or-knowingly-unlawful>.