

**PERMIT NO. 1041-24**

**ISSUANCE DATE:**



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### SURFACE MINING PERMIT

Permittee: **Twin Pines Minerals, LLC**  
**4599 East Lake Boulevard**  
**Birmingham, Alabama 35217**

Operation: **Saunders Demonstration Mine**

County: **Charlton**

Permitted Acres: **820**

In accordance with the provisions of the Georgia Surface Mining Act of 1968, O.C.G.A. §12-4-70, et seq., and the Rules of the Georgia Department of Natural Resources, Chapter 391-3-3, Surface Mining, both as amended, this Permit is issued for the surface mining operation as recorded hereon and presented in the Application received on **November 13, 2020**, and the Mining Land Use Plan approved on **xx xx, xxxx**.

This Permit is conditioned upon the Operators continued compliance with the provisions of the Georgia Surface Mining Act of 1968, O.C.G.A. §12-4-70, et seq., and the Rules of the Georgia Department of Natural Resources, Chapter 391-3-3, Surface Mining, both as amended; the provisions of the Approved Surface Mining Land Use Plan and Approved Amendments, if any; and any special conditions which may be attached to this Permit.

This Permit shall be rendered null and void should the mining activity not commence within twelve (12) months from the date this Permit becomes final, or should cessation of mining occur for a period of eighteen (18) months without the Operator obtaining an inactive status classification through an Approved Amendment of the Surface Mining Land Use Plan.



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Jeffrey Cown, Director  
Environmental Protection Division

#### Conditions for Surface Mine Facility

##### A. Mining Activities:

## Special Conditions

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1. The Permittee shall implement site survey controls to ensure that all acres affected by the mining operation will be on permitted lands.
2. The Permittee shall maintain adequate erosion and sediment controls in accordance with The Manual for Erosion and Sediment Control in Georgia, latest edition.
3. The Permittee shall obtain any necessary water permits and maintain compliance with the Water Quality Control Rules, Chapter 391-3-6-.16.
4. The Permittee shall post an identification sign which shall display the Permittee's Name, Mine Name, Permit Number at the entrance of the property.
5. The Permittee shall allow no water to be discharged from ponds unless water is being used in surface mining operations onsite and any remaining water from the operations is returned to the ponds (ie: mineral separation plant, process water ponds, pit).
6. The Permittee shall inspect the pond berms daily. These inspection records shall be maintained onsite for a minimum of four (4) years.
7. The Permittee shall maintain all pond monitoring and maintenance records onsite for a minimum of four (4) years.
8. The Permittee shall submit to the Division an approvable Pond Operation Monitoring Plan within 90 days of the issued permit. If the Permittee cannot submit a Pond Operation Monitoring Plan within 90 days, an extension may be requested and obtained by the Division. The Plan shall be implemented within 30 days of approval by the Division and shall include a milestone schedule. The plan shall establish elevations and installation of associated markers to monitor the maximum water and target operating levels within the ponds.
9. The Permittee shall submit to the Division an installation certification for the evaporators signed by an independent Georgia-registered Professional Engineer within 60 days of installation.
10. The Permittee shall submit to the Division an annual report on the evaporation system describing proper function and maintenance throughout the year. The report will be due on or before April 1 of each year, covering the prior calendar (Jan.- Dec.) year. Report shall be prepared by a Georgia-registered Professional Engineer or Professional Geologist.

## B. Reclamation

1. The Permittee shall submit a Reclamation Report and Release Request Form upon completion of reclamation responsibilities on affected acreage.

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2. The Permittee shall collect soil boring data to evaluate for the presence or absence and depth of consolidated black sands within at least eight mining transects prior to initiating excavation of any transect. The Permittee shall submit a report to the Division at least 90 days from documentation of the soil boring data. Soil borings will be placed in a 200-foot by 200-foot grid, one sample will be collected from the approximate center of each grid, and the presence or absence and depth of consolidated back sands in each sample will be noted, documented, and mapped.
3. The Permittee shall submit to the Division a quarterly certified report by a Georgia-registered Professional Engineer or Geologist that describes where, when, and how bentonite was placed. The report shall be due by the 1<sup>st</sup> day of May, August, October, and February, covering the reporting period for the preceding quarter.
4. The Permittee shall request the Divisions approval to proceed without installing the soil amendment layer in areas absent of consolidated black sands.

### C. Additional Permittee Requirements

1. The Permittee shall fully satisfy all applicable financial assurance responsibility requirements in accordance with Surface Mining Rule 391-3-3-.03
2. The Permittee shall submit an Annual Status Report on forms provided by the Division. The report will be due on or before April 1 of each year, covering the prior calendar (Jan. - Dec.) year.
3. The Permittee shall submit any proposed operational changes to the approved Mine Land Use Plan to the Division for approval as an amendment prior to changing or varying from the plan. No expansion of the permit boundary will be approved for this permit.
4. The Permittee shall collect samples for water-quality laboratory analysis from groundwater and surface water monitoring locations monthly for one year prior to initiating mining; quarterly during mining; and semi-annually during the post-mining monitoring period unless otherwise specified by the Division.
5. The Permittee shall notify the Division within 30 days if changes in water quality trends are observed that cannot be directly attributed to unrelated mining activities.
6. The Permittee shall submit a quarterly water quality report to the Division during the first two years and semi-annually thereafter, unless notified by the Division for an alternate schedule. The quarterly report shall be due by the 1<sup>st</sup> day of May, August, October, and February, covering the reporting period for the preceding quarter. Semi-annual reports shall be due by the 1<sup>st</sup> day of February and August, covering the reporting period for the preceding semi-annual timeframe.

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7. The Permittee shall notify the Division within 30 days of the monitoring event if post-mining groundwater levels:
  - a. Drop below 2.7 feet of the normal elevations established in the historical hydrograph data shown on sheet 13 of the approved Mining Land Use Plan.
  - b. Fluctuate non-uniformly in the north, central or south sections.
8. The Permittee shall submit a Contingency Plan for the Division's approval if the cause for the change in groundwater-level or water quality cannot be directly attributed to unrelated mining activities, within 30 days of notifying the Division of C.5 and/or C.7.
9. The Permittee shall submit a request to the Division for approval to abandon the piezometer and Floridan aquifer wells at the conclusion of mining and reclamation activities and prior to final shutdown of the site. All soil borings, monitoring wells and piezometers that have been completed/installed at this site, shall be plugged and abandoned in accordance with the Water Well Standards Act.
10. This permit supersedes all other previous permits, special permitting conditions, and requirements of previously approved surface mining plans associated with this mining operation.