



December 14, 2022

CERTIFIED LETTER  
RETURN RECEIPT REQUESTED

Haile Gold Mine, Inc.  
Attn: Nickoli Riggins  
6911 Snowy Owl Rd  
P.O. Box 128  
Kershaw, SC 29067

RE: Approval of Application and Reclamation Plan to Modify a Mine Operating Permit  
Modification of Mine Operating Permit I-000601 (Mod 19-2)  
Haile Gold Mine, Lancaster County

Dear Mr. Nickoli Riggins,

The S.C. Department of Health and Environmental Control (DHEC) has approved the application and reclamation plan for the Haile Gold Mine as of December 14, 2022. DHEC has approved the reclamation bond estimate submitted in the amount of \$103,767,080.42 to be annually increased per Part V of the Mine Operating Permit (current amount is \$72,544,079.99).

With the receipt of the reclamation bond and the approval of the application and reclamation plan, this letter serves as official notification that the Mine Operating Permit for the Haile Gold Mine is being modified as of the date of this letter. Enclosed are the permit document, reclamation plan, and mine and reclamation maps.

A guide to board review outlining the procedure for requesting a final review is enclosed. Should there be any questions or if we may be of further assistance, please do not hesitate to contact me at (803) 898-7609 or by e-mail at [eddyje@dhec.sc.gov](mailto:eddyje@dhec.sc.gov). Kaylin Joye and Sarah Harris are the mine inspectors for this site.

Sincerely,

Jeremy E. Eddy, P.G.  
Manager - Mining and Reclamation Section  
Division of Mining and Solid Waste Management

cc: Marty Lindler, Kaylin Joye, Sarah Harris, Lillian McFadden – DMSWM  
Juli Blalock, Henry Porter – BLWM; Steve McCaslin - BoAQ  
Byron Amick, Chuck Hightower; John McCain, John Poole – BoW;  
Jeff Phillips – MSHA; Shawn Boone – USACE  
Steve Willis ([swillis@lanastercountysc.net](mailto:swillis@lanastercountysc.net)) - Lancaster County





## MINE OPERATING PERMIT

### PART I:

### Haile Gold Mine Haile Gold Mine, Inc.

**Haile Gold Mine, Inc.**, a corporation, has been granted a Mine Operating Permit, Mine Permit Number I-000601, to operate the Haile Gold Mine in accordance with the S.C. Mining Act (S.C. Code Sections 48-20-10 *et seq.*, 1976) and Regulations 89-10 *et seq.* The operator shall conduct this operation as represented in documents submitted to support the issuance of this permit.



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JEREMY E. EDDY, P.G.

MANAGER - MINING AND RECLAMATION SECTION  
DIVISION OF MINING AND SOLID WASTE MANAGEMENT

**PERMIT NUMBER:** I-000601  
**ORIGINALLY ISSUED:** July 03, 1984  
**MODIFIED:** December 14, 2022

In accordance with Section 48-20-60 of the South Carolina Mining Act, this Mine Operating Permit will remain valid unless it terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The anticipated mining completion date is shown on the *Schedule for Conservation and Reclamation Practices* in the *Reclamation Plan*.

The approved *Permit Application*, *Reclamation Plan*, and all supplemental information referenced herein, are an integral part of this permit. *Land Entry Agreements and Mine Maps* as identified in Part II and Part IV, respectively, are also a part of this permit.

# Haile Gold Mine, Inc.

**Home Office Address:** Haile Gold Mine, Inc.  
6911 Snowy Owl Rd  
PO Box 128  
Kershaw, SC 29067

**Address for Official Mail:** Haile Gold Mine, Inc.  
Attn: Nickoli Riggins  
6911 Snowy Owl Rd  
PO Box 128  
Kershaw, SC 29067

**Company personnel and title to be the contact for official business and correspondence [South Carolina Department of Health and Environmental Control (DHEC) should be notified in writing immediately of any change in contact, address, telephone or fax numbers]:**

Nickoli Riggins  
Environmental Manager

Telephone: (304) 940-6495  
Email: Nickoli.Riggins@oceanagold.com

**LOCATION:** The mine is located on the Kershaw, SC U.S.G.S. 7.5' Topographic Map. The approximate geographic coordinates for the site are:

Latitude: 34.5979 Longitude: -80.5388

**DESCRIBE LOCATION:** The operation is located in Lancaster County, approximately 4.0 mile(s) northeast of Kershaw, S.C. Specifically, the site is located at 6911 Snowy Owl Road.

## Part II: MINE OPERATIONS

Haile Gold Mine, Inc., also referred to as the operator, is permitted to mine gold at the Haile Gold Mine. The maximum depth to the open pit floor will be -690 feet mean sea level within the Ledbetter Pit, and the maximum depth of underground mining will be 1,315ft below ground surface (to an elevation of -774 feet mean sea level). Mining will take place on tracts of land owned by the referenced operator. These tracts of land are identified in the submitted *Land Entry Agreements* (LEAs).

### MINE/PIT CHARACTERIZATION:

The operation will consist of the phased mining of multiple open pits and one underground mine utilizing the open stope method, as described in *Detailed Project Description for Proposed Haile Gold Mine Expansion (Revision 3)* of the Application to Modify a Mine Operating Permit (Appendix B). In summary, five (5) pits (Mill Zone, Snake, Red Hill, Ledbetter, and Haile) will be excavated and interconnected to form one large pit, which will eventually fill with water and become Ledbetter Reservoir. Portions of this pit may be backfilled with “green” and lime-amended “yellow” overburden material, as defined by the ***Overburden Management Plan*** (Appendix C). The underground stope will be excavated from a bench in Snake Pit and will be filled with cemented rock fill. Two (2) other pits (Champion and Champion Southwest) will be excavated on the west side of Highway 601 and allowed to fill with water.

Blasting will be used to fragment overburden and ore prior to loading into haul trucks. Ore will be transported to a stockpile at the lined overburden storage area or to the primary crusher at the mill. The processing mill and tailings impoundment are located as depicted on the mine map. Overburden will be hauled to designated storage facilities or back-filled into previously mined pits, per the ***Overburden Management Plan*** (Appendix C). Surficial soil (i.e., growth media) will be retained for reclamation.

### PROCESSING PLANT LOCATED ON MINE SITE:

The processing plant, generally, consists of a primary crusher, conveyors, four (4) grinding mills, flotation tanks, eight (8) carbon-in-leach (CIL) tanks, a refinery building, and three (3) cyanide destruct tanks. Gold shall be extracted from ore by a CIL process, with sodium cyanide as an active leaching agent. Waste material produced by this process (i.e., tailing) shall be pumped as a slurry to a lined tailings storage facility (TSF) (i.e., Duckwood TSF) and permanently stored. Tailings shall be deposited sub-aerially in such a way that the remaining solution will be pooled at the southern end of the impoundment. Water accumulating in the reclaim pool may be pumped back to the plant for reuse in a closed-loop system or allowed to evaporate. No other release of process water is authorized without modification of the water treatment plant and approval by the Department’s Bureau of Water. See Part X: Additional Terms & Conditions.

### MINE DEWATERING:

Extraction wells shall be installed around pit perimeters and operated to prevent groundwater from entering the pits or underground stope during active mining. The predicted drawdown of groundwater will evolve over time as the pits and stope are opened and reclaimed. Groundwater pumped from these extraction wells shall be treated as non-contact water, and may be used for site construction and dust suppression or discharged into Haile Gold Mine Creek. It may also be pumped to the process plant for use in the mill, but would then be treated as process water. See Part X: Additional Terms & Conditions.

### BLASTING:

Blasting shall be performed by a S.C. licensed blaster, through the use of advanced blasting techniques, to include electronic programmable delays and modern blasting agents, in order to maximize blasting efficiency and minimize the displacement of blasted material, the generation of fly rock, and ground vibrations. The blasting schedule, the size of each blast, and the amount of explosive used in an individual blast is variable, depending on rock characteristics, drilling and production schedules, and safety considerations.

Blasting is not permitted within two hundred (200) feet of a public road. In addition, when blasting will occur within three hundred (300) feet of a public road (i.e., Mill Zone and Champion pits), the operator shall coordinate with S.C. Department of Public Safety and Lancaster County Department of Public Works to ensure the safety of motorists. All blasts shall be designed to ensure compliance with R.89-150 Surface Blasting Requirements.

In accordance with R.89-150(4)l., the operator shall maintain a minimum blasting setback of 1,000 feet between the nearest point of blasting and any occupied structures not owned by the operator as of the date of permit issuance or where there is no waiver of damage. The blasting setback may be decreased if the operator can demonstrate that public safety can be ensured through the use of alternate precautions.

Haile Gold Mine may store explosives on site, as proposed in the **Explosives Principal Management Plan** (Appendix D). The storage of explosives shall be regulated by the Bureau of Alcohol, Tobacco, Firearms, and Explosives and the S.C. Fire Marshal.

See Part X: Additional Terms & Conditions.

**SIGNIFICANT CULTURAL OR HISTORICAL SITES:**

One historic resource (Haile Gold Mine) and one historic structure (Haile Gold Mine School) are eligible for listing in the National Register of Historic Places (NRHP). Twenty-seven archaeological sites located within areas to be affected by mine development have been or shall be evaluated for eligibility for listing in the NRHP. The operator shall implement a **Memorandum of Agreement** (MoA)(Appendix I) with the USACE and the S.C. Historic Preservation Office to preserve, or to evaluate and mitigate as necessary, the eligible cultural and historic resources at the mine in accordance with Appendix A (Cultural Resources Management Plan) of the MoA. See Part X: *Additional Terms and Conditions*.

**VISUAL SCREEN:**

To appropriately screen the operation from view, the operator shall maintain a minimum 100ft. setback between mining activity and all property lines. The outside 50ft of the setback shall remain undisturbed and may require additional vegetation to effectively screen the operation from view. The only exception to the 50ft undisturbed buffer is the northeast section of the Duckwood Tailings Storage Facility, which may reduce the undisturbed buffer to 25ft. Additional safety measures (e.g., fence) may also be installed, if determined to be appropriate.

Additionally, several facilities will be visible above existing woodlands because of their height (e.g., overburden storage areas and the tailings impoundment). Concurrent with construction, sections and benches of these facilities shall be sloped and vegetated as soon as feasible to better blend with the surrounding environment.

**NOISE MONITORING AND CONTROL:** The operator shall use Best Management Practices (BMPs) to minimize noise from the mine site. These noise BMPs shall include, at a minimum, proper maintenance of mufflers on equipment (trucks, trackhoes, pumps, etc.) and consideration of special buffering measures if planning to operate equipment during nighttime hours. The operator may also use noise mitigation measures, such as sound cancelling devices on mining/milling equipment, vibration dampeners, and equipment isolation pads. Additional BMPs to be implemented may include electric engine starters on mining equipment, lower speed fans on coolers and radiators, and rubber liners in grinding mills.

**OTHER STATE OR FEDERAL PERMITS:** The operator must obtain, maintain, and update, as appropriate, all necessary State and Federal permits in order to construct and operate the mine.

**LAND ENTRY AGREEMENTS:** The operator is required to furnish and maintain up-to-date *Land Entry Agreements* on all lands covered under this permit. Any change in ownership on any portion of land covered by this permit, the operator is responsible for furnishing the appropriate and completed *Land Entry Agreements* (Forms MR-600 or MR-700) to DHEC within 30 days of the change of ownership.

Land Owner(s) as Listed on *Land Entry Agreement(s)*:

TMS #	Land Owner(s)
0119-00-001.05, 0119-00-002.05, 0119-00-007.00, 0119-00-008.00, 0119-00-009.00, 0119-00-009.01, 0119-00-010.00, 0119-00-011.00, 0119-00-011.01, 0119-00-011.02, 0119-00-061.00, 0119-00-085.00, 0119-00-086.00, 0119-00-098.00, 0119-00-101.00, 0119-00-102.00, 0119-00-103.00, 0119-00-104.00, 0119-00-105.00, 0119-00-106.00, 0119-00-107.00, 0119-00-108.00, 0119-00-109.00, 0119-00-110.00, 0119-00-111.00, 0119-00-112.00, 0119-00-113.00, 0119-00-114.00, 0119-00-115.00, 0119-00-116.00, 0119-00-117.00, 0120-00-022.02, 0135-00-016.00, 0136-00-031.06, 0136-00-036.00, 0140-00-009.01, 0140-00-009.02, 0140-00-012.00, 0140-00-014.00, 0140-00-023.00, 0140-00-026.00, 0140-00-027.00, 0140-00-028.00, 0140-00-028.01, 0140-00-029.00, 0140-00-030.00, 0140-00-031.00, 0140-00-031.01, 0140-00-045.00, 0140-00-045.01, 0140-00-046.00, 0141-00-035.00, 0141-00-036.00	Haile Gold Mine, Inc.

Total acres of the contiguous tract(s) of land for which the permit is granted:

OWNED 5,469.0                      LEASED 0.0                      TOTAL 5,469.0

**Part III: PERMITTED LAND**

This permit allows the operator to conduct mining operations within the permitted land as defined through the *Land Entry Agreement* submitted as part of the application. Permitted land as defined by Section 48-20-40(18) is "the affected land in addition to (a) lands identified for future mining to become affected land; (b) and undisturbed or buffer area that is or may become adjacent to the affected land." Therefore, this permit grants the operator the right to conduct active mining operations within the specified affected land, delineate land for future mine areas as future reserves, and to establish undisturbed buffer zones to mitigate any adverse effects to the surrounding environment.

**AFFECTED LAND:** 3,747.0 acres of land are to be affected by Haile Gold Mine, Inc. under the current mine plan; 3,747.0 of the affected acres shall be bonded, as shown on the Financial Assurance schedule (Appendix E). Areas not bonded should not be affected by mining operations until the financial assurance is updated. The affected acres are derived from the operator's response in the *Application for a Mine Operating Permit* and are shown on the approved mine map.

**FUTURE RESERVES:** 0.0 acres are identified as future reserves.

**BUFFER AREAS:** 1,722.0 acres are identified as buffer area, setbacks, or areas that will not be disturbed beyond the pre-mine natural state. These buffer areas are identified on the mine site map. Acres designated as buffer areas are not bonded under the reclamation bond. Any activity within the buffer areas (e.g. removal of timber) shall require **prior** notification and approval by DHEC.

**TOTAL PERMITTED AREA:** 5,469.0 acres as submitted on the *Land Entry Agreement(s)*.

**Part IV: MAPS**

The mine site map was prepared by OceanaGold – Haile Gold Mine. This map is further identified with the following SCDHEC map number and is part of the operating permit:

SM-0601-1V2 Mine Map

Dated: September 6, 2022

Additionally, these map layers can be found as .kml files in the Department's ePermitting system file. These files are also considered the official map and may be used for greater accuracy.

The reclamation maps were prepared by OceanaGold – Haile Gold Mine as shown in the **Reclamation Plan** (Appendix M).

## **Part V: RECLAMATION BOND**

Pursuant to Title 48 Chapter 20 Sections 10-310 (The South Carolina Mining Act), South Carolina Regulation 89-10-350 (The South Carolina Mining Regulations), and the Department's review of the project application and supplemental information, the total financial assurance required for the Haile Gold Mine is set at \$123,767,080.42 (which shall be increased to account for inflation), to be provided as set forth in Appendix B. Financial assurance will be provided by \$103,767,080.42 (plus inflation) in surety bonds and a \$20,000,000 interest bearing trust or other interest bearing account. All interest will accrue to the benefit of the Department for the prescribed uses. Financial assurance will be adjusted annually for inflation and for actual site conditions over time as determined by the Department. The surety bond and other financial assurance must be maintained in force continuously throughout the life of the mining operation and may only be released, partially or in full, after Department approval. The Department will not adhere to any prescribed bond release schedule but will only approve a release of bonds and other financial assurance after careful evaluation. When releasing financial assurance for a defined scope of reclamation upon its completion, a percentage of the financial assurance will be held by the Department until full effectiveness of the reclamation is demonstrated over an appropriate time period. Any reduction of the \$20,000,000 interest bearing trust or other interest bearing account shall be deemed a substantial modification of the permit as that term is used in S.C. Regs. 89-10, et seq.

No residual trust funds may be released to Haile by the Department until after twenty-five years have passed since the last measured water quality standards ("WQS") violation, if any – defined as at least two consecutive quarterly exceedances of the same parameter(s) at the same monitoring location – found by the Department or Haile that is determined by the Department to be attributable to Haile's operations. This twenty-five year period shall not begin to run until the later of: (1) active treatment of the tailings storage facility (TSF) and draindown of the potentially acid generating (PAG) facility have both transitioned to passive treatment; OR (2) the pit lakes reach equilibrium.

Each major facility closed at the mine will be treated separately for purposes of the twenty-five (25) year "clean monitoring" threshold for release of Trust funds. Exceedances of passive treatment for one PAG facility that restarts its twenty-five year "clean monitoring" obligation will not necessarily prevent SCDHEC from releasing a reasonable portion of Trust funds related to separate passive treatment for other PAG facilities or the TSF facility or related to any one of the three pit lakes that may have already satisfied their twenty-five (25) year "clean monitoring" threshold.

The public notice required by S.C. Regs. 89-100 announcing any proposed reduction in the interest-bearing trust shall provide the date of the last WQS violation, if any, found by SCDHEC to be attributable to Haile's operations.

All forms of financial assurance must be: (a) issued solely for the benefit of the State of South Carolina; (b) legally binding instruments acceptable to the Department; (c) issued by or with a guarantor or surety or other financial institution acceptable to the Department; and (d) enforceable by the Department. Financial assurance will not be released under any circumstance without the appropriate Department approvals. Financial assurance instruments must ensure payment to the Department upon the operator's failure to comply with its obligations concerning reclamation, closure or post closure responsibilities, arising from statute, regulation, or this permit. The Department may, at its discretion, approve other forms of financial assurance through the life of the project as long as adequate coverage is maintained.

Financial assurance held by the State may be used by the Department, at its discretion, for the purpose of implementing, repairing, or enhancing any aspect of reclamation, closure and post-closure that it determines necessary.

Financial assurance may be cancelled only by sending notice of cancellation by certified mail to the Principal and to the Department, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation to both the Principal and the Department as evidenced by the return receipts and actual written acknowledgement by the Department. If the financial assurance is not replaced by another acceptable mechanism within 60 days of the notification of cancellation, the funds will be paid to the Department upon demand.

The funding of financial assurance will be phased in accordance with Appendix B to this permit. Failure to provide funding in compliance with Appendix B shall be grounds for permit revocation and bond forfeiture.

<u>Total Amount Funded by Year*</u>	<u>Mod 14-1 Contributions**</u>	<u>Mod 19-1 Contributions***</u>
\$4.2M (2021)	\$4.2M (thru 2021)	--
\$5M (2022)	\$800k	--
\$7.8M (2023)	\$800k	\$2M
\$9.6M (2024)	\$800k	\$1M
\$11.4M (2025)	\$800k	\$1M
\$13.2 (2026)	\$800k	\$1M
\$15M (2027)	\$800k	\$1M
\$16.8 (2028)	\$800k	\$1M
\$18M (2029)	\$200k	\$1M
\$19M (2030)	--	\$1M
\$20M (2031)	--	\$1M
Total	\$10M	\$10M

\*Amount includes only Haile money placed in Trust and does not include earnings on the Trust contributions, which are invested by the South Carolina Treasurer in the State Treasurer's Long-Term Pool Portfolio. Actual current value of the Trust (including earnings) as of 12/31/21 was \$4,526,613.15.

\*\*FEIS Contributions are due on October 1st of each year.

\*\*\*SEIS Contributions are due within one year of ROD and 404 Permit issuance.

## Part VI: PROTECTION OF NATURAL RESOURCES

### 1. Describe the area of and around the mine site. Specify topography, surface water systems, wildlife habitats, residential houses, commercial properties, recreational areas, and/or public roads.

The site is located in a rural area of southern Lancaster County, approximately 1.5 miles northeast of Kershaw, S.C. Historically, this site has been periodically mined for gold since 1827 by a variety of methods, and reclaimed with pine plantations and grasslands. U.S. Highway 601 bisects this site, separating the Champion Pit and Duckwood Tailings Storage Facility from the rest of the operation. The Kershaw-Lancaster county line forms the southeast border, while Ernest Scott Rd forms the northeast border. The immediate area around this site is mostly undisturbed vegetation with some rural residences to the northeast and west. The Kershaw Correctional Institution (due west), Kershaw Minerals Laboratory (due west), and Haile Gold Mine Baptist Church (due east) are notable places in the vicinity of the gold mine.

Located at the contact between the Coastal Plain and Piedmont physiographic regions, the topography at this site ranges from 370ft to 550ft amsl. Haile Gold Mine Creek and its tributaries, tributaries to the Little Lynches River, and the upper reaches of Camp Branch Creek traverse the site.

### 2. Methods used to prevent physical hazards to persons and to any neighboring dwelling, house, school, church, hospital, commercial or industrial building, or public road.

The operator shall install and maintain a perimeter fence to restrict site access and maintain security. This fence shall be a minimum of five (5) feet tall and made of woven wire material. It shall be constructed in the areas designated on the approved mine map. *Warning* and/or *Danger* signs shall be posted along the perimeter fence. A gate shall be installed at all entrances to the mine site and kept locked during inactive periods.

Potential impacts to U.S. Highway 601, S.C. Highway 265, Earnest Scott Road, Haile Gold Mine Road, and Duckwood Road shall be minimized by a 100-foot setback from major mine facilities (e.g., overburden storage areas, haul roads, pits, and the tailings impoundment). Operator shall use BMPs to prevent accumulation of sediment/soil on public roads carried by trucks and other vehicles exiting the mine site; any accumulations shall be removed by the operator on a daily basis or more frequently if needed. To reduce the potential of trackout on public roads, the operator shall construct a paved road that extends the width of the haul road and stretches a minimum of one hundred (100) feet in length.

The operator shall establish a protected area or establish procedures to minimize fuel spillage or incidental spillage of other petroleum products during storage, refueling of equipment or in the performance of routine maintenance on equipment. Contaminated materials resulting from contact with petroleum products shall be removed from the site and disposed of properly to prevent contamination to ground and surface water resources.

**3. Methods used to prevent an adverse effect on the purposes of a publicly owned park, forest, or recreation area.**

There are no publicly owned parks, forests, or recreation areas near this mine site. Forty Acre Rock Heritage Preserve is located approximately six (6) miles north-northeast of the mine site. Carolina Sandhills National Wildlife Refuge is located approximately 12 miles south of the mine site. Given these distances between Haile Gold Mine and these publicly owned properties, no adverse effects are anticipated from mine operations.

**4. Measures taken to insure against substantial deposits of sediment in stream beds or lakes.**

The operator shall comply with any NPDES General Stormwater Permits for Industrial Activity and the Stormwater Pollution Prevention Plan developed for the mine. The NPDES General Stormwater Permit requires utilization of structures and non-structural techniques for stormwater management, visual assessment and documentation of the effectiveness of stormwater controls, and implementation of corrective actions, if needed. The NPDES Permit also requires completion of routine inspections and benchmark sampling.

The operator shall also comply with any NPDES Stormwater Construction Permits issued for this site.

**5. Measures taken to insure against landslides or unstable mine walls.**

The operator shall be responsible for maintaining stable mine walls and appropriate setbacks. The operator shall implement recommendations with regard to footwall stability in the Snake, Ledbetter, Haile, Mill Zone, and Red Hill Pits pursuant to the **Report of Feasibility Level Pit Slope Evaluation** (Appendix E). The operator shall complete slope stability analyses for Chase and Champion Pits prior to their development.

Overburden Storage Areas and the Duckwood Tailing Storage Facility impoundment shall be constructed with overall slopes no steeper than 3H:1V, unless otherwise approved by the Department. The operator shall construct all Potentially Acid Generating Overburden Storage Areas pursuant to the **Haile Gold Mine Tailing and Process Water Management Permitting Design Report** (Appendix F), and revised in the **Duckwood Tailings Storage Facility Detailed Design** (Appendix G), and the Dam Safety Construction Permit. Pursuant to the NPDES General Stormwater Permit, the operator shall install and maintain appropriate stormwater controls at overburden storage and the tailings impoundment areas to ensure slope stability.

**6. Measures taken to insure against acid water generation at the mine site that may result in pollution on adjacent property.**

The operator shall implement the Haile Gold Mine **Overburden Management Plan** (Appendix C) to identify, separate, and manage potentially acid generating materials. Waste rock with a strong potential to generate acid rock drainage (i.e., "red" material) shall be managed in a lined potentially acid generating overburden storage area. Waste rock with a moderate potential to generate ARD shall be managed in a PAG OSA or amended with a Department-approved base (e.g., lime) and used as subaqueous fill within previously mined pits. Inert waste rock and overburden may be used in mine development or managed in the James, South, or Ramona OSA or used for pit or stope backfill. The operator shall implement the confirmation sampling protocol specified in the approved Haile Gold Mine **Overburden Management Plan** (Appendix C) to verify effective segregation and management of waste rock.

Runoff and seepage from mine facilities having the potential to generate ARD shall be collected and sent to the mill for use as process makeup water or treated pursuant to the NPDES Discharge Permit before being discharged.

**7. Measures taken to minimize or eliminate fugitive dust emissions from the permitted area.**

The operator shall comply with any Air Quality Construction Permit and/or Title V permit issued for this site. The mine operator will use appropriate measures (e.g. water truck, dust suppressants) to control fugitive dust created by moving equipment along haul roads. The operator, where feasible, shall establish vegetation in non-active mine areas barren of vegetation to stabilize the soil and reduce potential for wind erosion and dust emissions.

**Part VII: STANDARD CONDITIONS OF MINE OPERATING PERMIT**

1) SURVEY MONUMENTS: In accordance to R.89-130, the operator shall install and maintain the two required permanent survey monuments, or control points, within the permitted area as shown on the mine site map. At the discretion of DHEC, the operator may be required to mark the area to be affected with flagging or other appropriate measures.

2) RIGHT OF ENTRY: Pursuant to Section 48-20-130 and R.89-240, the operator shall grant DHEC and/or duly appointed representatives access to the permitted area for inspection to determine whether the operator has complied with the reclamation plan, the requirements of this chapter, rules and regulations promulgated hereunder, and any terms and conditions of this permit.

3) RECORDS RETENTION: All records are to be maintained through additional terms and conditions of this permit or by regulations. Records shall be kept on site or at the office identified for receipt of official mail and open for inspection during normal business hours. The records shall be maintained for a minimum of fifteen (15) years or as specified by DHEC. The operator shall furnish copies of the records upon request to the Department.

4) PERMIT MODIFICATIONS: Pursuant to Section 48-20-80, the operator may apply for modification of the permit and/or *Reclamation Plan*, which may be modified upon approval by DHEC. Requests for permit and/or *Reclamation Plan* modifications may be made to DHEC on Form MR-1300. The operator shall submit any requested supporting data for consideration during DHEC's evaluation of the modification request. If a modification request is determined to be substantial by DHEC, the modification request will be public noticed pursuant to R.89-100 and a modification fee will be required as specified in R.89-340. If DHEC determines activities proposed under the *Reclamation Plan* and other terms and conditions of the permit are failing to achieve the purpose and requirements of the S.C. Mining Act and Regulations, DHEC shall notify the operator of its intentions to modify the permit and/or *Reclamation Plan* pursuant to Section 48-20-150 and may modify the permit and/or Reclamation Plan consistent with Section 48-20-150.

5) TRANSFER OF PERMIT: Pursuant to Section 48-20-70, this permit may be transferred to another responsible party. The transfer of the permit must be conducted in accordance with R.89-230. The transferor of the permit will remain liable for all reclamation obligations until all required documents, plans, and the replacement reclamation bond have been submitted and approved by DHEC. The transfer will be considered complete when all parties have received notification by certified letters of the approval of the transfer by DHEC.

6) DURATION OF MINE OPERATING PERMIT: In accordance with Section 48-20-60, this Mine Operating Permit will remain valid unless this permit terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The proposed anticipated mining completion date is shown on the *Schedule for Conservation and Reclamation Practices* in the *Reclamation Plan*.

Pursuant to R.89-80(B), the operator shall conduct reclamation simultaneously with mining whenever feasible. Reclamation shall be initiated at the earliest practicable time, but no later than 180 days following termination of mining of any segment of the mine, and shall be completed within two years after completion or termination of mining on any segment of the mine.

## Part VIII: ENFORCEMENT ACTIONS

Pursuant to Section 48-20-30 of the S.C. Mining Act, "DHEC has ultimate authority, subject to the appeal provisions of this chapter, over all mining, as defined in this chapter, and the provisions of the chapter regulating and controlling such activity." This allows DHEC to assist, cooperate with, or supersede other State agencies in taking enforcement action on violations of the State Regulations or violations of the S.C. Mining Act to ensure the purposes of this Act are enforced.

COMPLIANCE: The operator shall comply at all times with all conditions of this mine operating permit. Non-compliance with this mining permit, statute, or regulations could lead to permit revocation and bond forfeiture pursuant to Sections 48-20-160 and 48-20-170 or other enforcement action allowed by law.

Compliance with the Mine Operating Permit requires the operator to conduct the mining operation as described in the approved *Application for a Mine Operating Permit*. Variance from the *Application for a Mine Operating Permit*, this permit, statute or regulation, without first receiving DHEC approval, shall be deemed non-compliance with the permit.

An operator or official representative of the mine operator who willfully violates the provisions of the S.C. Mining Act, rules and regulations, or willfully misrepresents any fact in any action taken pursuant to this chapter or willfully gives false information in any application or report required by this chapter shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined not less than one hundred dollars nor more than one thousand dollars for each offense. Each day of continued violation after written notification shall be considered a separate offense.

The operator is responsible for all mining activity on the permitted mine site.

## Part IX: REPORTS

1) ANNUAL RECLAMATION REPORTS: The operator shall comply with Section 48-20-120 and Regulation 89-210 and submit an *Annual Reclamation Report* on Form MR-1100 as supplied by DHEC. The form for the report will be sent by regular mail to the operator to the mailing address shown on the previous year's *Annual Reclamation Report*. The operator should receive the report form from DHEC by July 1 of each year; however, the operator is ultimately responsible for obtaining the *Annual Reclamation Report* form and is not excused from penalty fees for failure to submit the report on time.

The Annual Operating Fee is a part of the *Annual Reclamation Report*. Failure to submit a complete *Annual Reclamation Report* and fee, in accordance with Section 48-20-120 and R.89-340, will result in a late penalty payment. The *Annual Reclamation Report* and Annual Operating Fee are required if there is any permitted land not fully reclaimed and released by DHEC by June 30 of each year.

2) SPECIAL REPORTS: DHEC may at any time request information, data, or explanations from the operator as to conditions relating to the permitted mine site. Such requests from DHEC shall be made in writing to the operator with an appropriate time frame stated for the submittal of the requested information to DHEC. The operator must produce the information requested within the timeframe specified by DHEC.

## Part X: ADDITIONAL TERMS AND CONDITIONS

### General Operating Conditions

1. The operator shall establish wetland buffers and avoid wetland impacts unless such impacts have been permitted by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act and by the Department pursuant to Section 401 Certification of Water Quality.
2. The operator shall follow the Environmental Monitoring and Management Plan (Appendix Q).

### Public Safety

3. The operator shall remain signatory to the International Cyanide Management Code for the Manufacture, Transport, and Use of Cyanide in the Production of Gold, hereby referred to as “the Cyanide Code”. The operator shall adhere to the Cyanide Code’s principles and standards of practice for the duration of milling operations.
4. The operator shall develop and maintain an **Emergency Preparedness and Response Plan** (Appendix H) in accordance with local, state, and federal requirements. The operator shall review the **Emergency Preparedness and Response Plan** (Appendix H) annually and provide updated contact information to participating local, state, and federal government agencies, as necessary.
5. The operator shall install and maintain perimeter, wildlife, and security fences, as shown on the approved mine map. Warning and/or Danger signs shall be placed around the perimeter at approximately five hundred foot intervals. The Department may require the operator to add, move, repair, or maintain security fencing as needed to enhance public safety.

### Cultural Resources

6. The operator shall implement any **Memorandum of Agreement** (MoA) (Appendix I) with the USACE and the South Carolina State Historic Preservation Office to preserve or evaluate and mitigate as necessary, the eligible cultural and historic resources at the mine in accordance with Appendix A of the MoA (the **Cultural Resources Management Plan**). If unanticipated archaeological materials are encountered prior to or during construction of mine facilities, or during mining, then the operator shall implement Appendix B of the MoA (the **Unanticipated Discovery Plan**).

### Tailings Storage Facility

7. The operator shall construct and operate a recirculating, no discharge process water system to include a tailings impoundment to be constructed in five stages; a reclaim pool; a groundwater collection system and sump; and a process solution under drain system with pond; and associated pumps and piping to return process water to the mill for reuse. The tailings impoundment and delivery system shall be constructed as specified in the **Haile Gold Mine Tailing and Process Water Management Permitting Design Report** (Appendix F), and revised in the **Duckwood Tailings Storage Facility Detailed Design** (Appendix G). Additionally, the direct placement of overburden material for Stage 4 and Stage 5 shall follow the approved **TSF Confirmation Sampling and Mitigation Plan** (Appendix T), otherwise overburden material shall originate from “green” overburden storage areas only after confirmation sampling that the material is “green” based on the **Overburden Management Plan** (Appendix C).
8. The operator shall construct and operate the tailings conveyance system/process water return system pursuant to the **Tailings Distribution Design Report** (Appendix J).
9. Once construction of each phase of the tailings impoundment has been completed, a construction certification report shall be submitted to the Department by a S.C. licensed engineer other than the design engineer. This report shall include, at a minimum, information prepared in accordance with the detailed design requirements. In addition, the construction certification report shall contain as-built drawings prepared and sealed by a S.C. licensed engineer noting any deviations from the approved engineering plans, and a comprehensive narrative by the engineer. Upon approval of the construction certification report and a satisfactory Department inspection, the Department will approve deposition of tailings within the unit.

10. The operator shall operate, maintain, and inspect the tailings delivery system, the tailings impoundment, the under drain collection pond, and associated leak collection and removal system, pursuant to the Dam Safety Permit and the ***TSF Operation, Maintenance, and Inspection Manual*** (Appendix K). Process water within the reclaim pool shall be managed so as to maintain storage capacity for the Probable Maximum Precipitation (PMP) event (i.e., 47.96 inches) with four (4) additional feet of freeboard between the pond's surface elevation and the crest of the tailings dam. The Department shall be notified within twenty-four hours if the freeboard between the surface elevation of the reclaim pond and the crest of the tailings dam is less than eight (8) feet and written notification shall be submitted within seven (7) working days. This written notification shall include a report on what actions will be taken to reestablish and maintain the freeboard of eight (8) feet.
11. Data collection pursuant to the ***TSF Operation, Maintenance, and Inspection Manual*** (Appendix K), and any interpretation thereof, shall be retained on site and accessible for Department review.
12. The operator shall review the ***TSF Emergency Action Plan*** (Appendix L) annually and submit updated contact information to participating governmental agencies as necessary.
13. The operator shall inspect the Leak Collection and Removal System (LCRS) associated with the TSF underdrain pond daily and monitor accumulated liquids monthly for total volume, field pH, and field conductivity. If there is insufficient volume available to test, this should be entered into the operating record. The operator shall investigate and report instances where the volume has exceeded the 12 month rolling average accumulation over 50 gallons per day; or the 3 month rolling average accumulation over 150 gallons per day. The report shall be in writing and submitted within seven (7) working days of the event and include details of the investigation with proposed corrective action.
14. Groundwater routed from beneath the composite liner and reporting to the access sump downgradient of the tailings impoundment shall be monitored (flow rate and volume) daily. The operator shall calculate and record monthly averages in the operating record, and report to the Department within 24 hours any sudden increase above baseline in the volume or quality (e.g., decrease in clarity, iron/aluminum precipitates) of water collected in the access sump. Groundwater monitoring data shall be summarized and reported semi-annually.
15. To ensure adequate storage capacity through life of mine, the operator shall evaluate the stored density and volume of tailings relative to the impoundment's projected filling curve [Drawing A210 of the ***Duckwood Tailings Storage Facility Detailed Design*** (Appendix G)] annually. The evaluation shall be certified by an independent, professional engineer registered in South Carolina and submitted to the Department by January 31 of each year.
16. No later than six months prior to the cessation of milling, the operator shall submit for review and approval a detailed plan and implementation schedule for closure of any phase of the tailings impoundment in accordance with the approved ***Haile Gold Mine Reclamation Plan*** (Appendix M). The plan should include provisions for closure of the associated process water recirculation system between the tailings impoundment and processing mill, management of excess process water, tailings mass consolidation (if necessary), and placement of the tailings cap/cover system with Department-approved quality control/assurance procedures.

### **Potentially Acid-Generating (PAG) Overburden**

17. The operator shall construct and operate lined facilities for the storage of pyritic waste rock with the potential to generate acid (e.g., West PAG OSA and East PAG OSA). These PAG OSA's shall be constructed as specified in the ***Haile Gold Mine Inc. Potentially Acid Generating Overburden Storage Area and Contact Water Ponds Detailed Design Report*** (Appendix N).
18. Once construction of a phase of any PAG OSA has been completed, a construction certification report shall be submitted to the Department by a S.C. licensed engineer other than the design engineer. This report shall include at a minimum information prepared in accordance with the detailed design requirements. In addition, the construction certification report shall contain as-built drawings prepared and sealed by a S.C. licensed engineer noting any deviations from the approved engineering plans, and a comprehensive narrative by the engineer. Upon approval of the construction report and a satisfactory Department inspection, the Department will approve the placement of pyritic waste rock within the unit.

19. Data collected pursuant to the **Operation, Maintenance, and Inspection Manual for JPAG OSA** [Appendix F of the **Haile Gold Mine, Inc. Potentially Acid Generating Overburden Storage Area and Contact Water Detailed Design Report** (Appendix N)], and interpretation thereof shall be retained on site and accessible for Department review.
20. Groundwater routed from beneath the composite liner at PAG OSAs via collection pipes shall be monitored daily (flow rate and volume). The operator shall calculate and record monthly averages and report to the Department within 24 hours any sudden increase above baseline in the volume or quality (e.g., decrease in clarity, iron/aluminum precipitates). Samples shall be collected quarterly for Appendix A (Groundwater – List B) constituents specified in the **Groundwater and Surface Water Monitoring Plan** (Appendix O). Groundwater monitoring data shall be summarized and reported semi-annually.
21. The operator shall follow the segregation and sampling protocols as detailed in the approved **Overburden Management Plan** (Appendix C).
22. No later than six months prior to the cessation of mining, the operator shall submit for review and approval a detailed plan and implementation schedule for closure of any phase of the PAG OSAs in accordance with the approved **Haile Gold Mine Reclamation Plan** (Appendix M). The plan shall include, though not be limited to, provisions for the recontouring of benches to achieve long-term stability, provisions for placement of the cap/cover system with appropriate quality control/assurance procedures, and development of a permanent vegetative cover.

### Wildlife

23. The operator shall install either a galvanized iron wildlife fence (8 feet tall) or a combined chain-link/barbed wire security fence around the perimeter of the tailings impoundment, the underdrain collection pond, and all approved ponds associated with the collection and storage of contact water.
24. The operator shall follow the approved **TSF Wildlife Monitoring, Reporting, and Response Plan** (Appendix P). At a minimum, this plan shall provide for timely reporting of any wildlife mortality and wildlife activity in or near the cyanide management areas. If wildlife mortality occurs, or noteworthy wildlife activity is observed, in the cyanide management areas (or other areas that may present a significant risk to wildlife), the operator shall plan, report, and undertake timely measures to prevent wildlife impacts.
25. The operator, in consultation with the USFWS and SCDNR, retained a biologist with avian expertise to provide independent observation of wildlife visitation at the tailings impoundment during the initiation of milling. The position was funded by the operator for one year in order to document seasonal variability in wildlife visitation and use of the facility. Now that standard operating parameters (e.g., sodium cyanide leaching concentrations) have been attained, and an absence of wildlife mortality has been noted by the Department, the frequency of third-party monitoring is left to the discretion of the operator. However, if the Department notes an increase in wildlife mortality, it may require additional monitoring.
26. The operator shall maintain a weak acid dissociable (WAD) cyanide concentration of less than 50 parts per million at or before the tailings discharge. Generally, WAD cyanide shall not exceed 30ppm in free liquids within the tailing pool. If samples indicate concentrations of cyanide greater than 30ppm within the tailing pool, the operator shall resample the pool within 15 days of becoming aware of the increased cyanide level. If resampling confirms cyanide levels above 30ppm in the tailing pool, the operator shall submit a plan to the Department within 15 days of receiving the confirmation data; this plan shall detail steps that will be taken to reduce pool cyanide levels. The plan must be implemented within 15 days of Department approval.

### Groundwater Protection

27. The operator shall follow the **Groundwater and Surface Water Monitoring Plan** (Appendix O), as approved by the Department.
28. The operator shall retain a hydrologic consultant, certified as a professional geologist or engineer in South Carolina, to serve as an independent third party in monitoring the impact of mine dewatering on surrounding water resources. The consultant shall be independent of Haile Gold Mine and will have responsibilities for maintaining and updating the Haile Gold Mine Water Resources Inventory and monitoring groundwater drawdown and quality. The consultant shall be responsible for anticipating adverse impacts on wells, ponds, springs, and streams, and for assisting the Department in response to complaints regarding water resources.

29. The consultant shall be informed of the installation schedule for dewatering wells around the developing pits. The consultant shall have access to construction details of the dewatering wells. Also, the consultant shall perform appropriate tests deemed necessary on the drilled dewatering wells to successfully evaluate groundwater drawdown and to anticipate adverse impacts on wells, ponds, springs, and streams. The operator shall collect and maintain data on the operation of the dewatering wells throughout the life of the mine. The nature and frequency of the data collected from pit dewatering wells shall be determined by the consultant.
30. If the Department determines that a water supply well, spring, seep, or pond is being adversely affected by mine dewatering, then the operator shall be responsible for mitigating the impact. Possible mitigation measures include, but are not limited to: improving an existing well, installing a new well, improving or enhancing an existing spring or seep, or providing a replacement water supply for an impacted well, spring, or seep. The operator shall supply the owner of an impacted well with a temporary water supply (e.g., bottled water for drinking, provisions for laundry) until a permanent water supply is re-established.

### **Blasting**

31. Prior to the initiation of blasting within any areas added to the permit via modification, the operator shall be responsible for a pre-blast survey of all structures (e.g., commercial buildings, homes, churches) that are within a one-half mile radius of the new blasting limits that wasn't previously afforded the opportunity. The survey may exclude any structures owned by the operator or where the operator has obtained a waiver of damage from the landowner. The survey shall be conducted by a consultant retained by the operator and approved by the Department. The consultant shall inspect each structure to ascertain the baseline condition of that structure before blasting begins.
32. Blasting shall not be conducted within 200 feet of a public road unless otherwise approved by the Department. All blasting operations shall be conducted in a manner so as to eliminate flyrock from leaving the permit boundary. When blasting must occur within 300 feet of public roads, the operator shall coordinate with the S.C. Department of Public Safety and Lancaster County Department of Public Works to ensure the safety of motorists.

### **Standby**

33. Prior to any temporary cessation of mining, the operator shall submit a mine deactivation plan for the Department's review and approval. Temporary cessation of mine operations is defined as the withdrawal of normal process plant personnel responsible for daily operations and maintenance of the permitted facilities and/or stoppage of ore processing or facility maintenance for a period in excess of two days. The deactivation plan shall include monitoring schedules, required facility maintenance activities, and provisions for the prevention of potentially adverse impacts caused by the cessation of activity. Inspection and approval from the Department shall be obtained prior to mine reactivation.

### **Closure/Reclamation**

34. The operator shall implement phased closure and concurrent reclamation during mine operation, as specified in the approved **Haile Gold Mine Reclamation Plan** (Appendix M) and schedule.
35. The operator shall submit unit specific closure plans for the combined Ledbetter Pit, Champion Pit, and Champion Southwest Pit at least six months prior to achieving final depth at each facility. Each plan shall include cross-sections depicting the location and elevation of PAG rock exposed in pit walls, and a strategy for preventing its oxidation. Pre-pumping groundwater elevation data collected in the immediate vicinity of each pit shall be utilized in the closure design to ensure inundation of pyritic wall rock (where possible) and alkaline-amended backfill. If pyritic wall rock occurs above the anticipated elevation of groundwater recovery, then an alternative method for encapsulation/treatment must be proposed, as needed, to achieve acceptable water quality. Closure plans shall include anticipated groundwater recovery elevation, cross-sections depicting the character and elevation of backfill, and final contour maps for each backfilled unit.

The operator shall grade, contour, and vegetate the surficial coastal plain sand unit to a gradient no steeper than 3H:1V. Unless otherwise approved by the Department, the underlying saprolitic unit shall be graded no steeper than 3H:1V to a depth of six feet below the anticipated water level of future pit lakes. Standard soil conservation practices (e.g., terraces, diversions, channel protectors) shall be proposed to control and dissipate the energy of runoff where appropriate on all slopes.

36. The operator must monitor and manage the development of pit lakes pursuant to the **Adaptive Management Plan** (Appendix R) submitted to DHEC (correspondence from J. Pappas to A. Rowe, dated June 9, 2014) and any Department-approved modifications thereto.

## APPENDIX A

### MODIFICATIONS TO MINE PERMIT I-000601

NUMBER	DATE	DESCRIPTION OF MODIFICATION <small>(PA= Permitted Acreage; AA= Affected, Bonded Acreage; FR= Reserves Acreage, B= Buffer Acreage)</small>
Issue	07/03/84	Permit issued; heap leach operations, closure, and reclamation.
14-1	11/05/14	PA=4,567.0ac, AA=2,464.0ac, FR=0ac, B=2,103.0ac Modified to expand site and reopen.
Revised	01/09/15	Revised pursuant to Settlement Agreement w/Sierra Club regarding Docket # 14-RFR-42. Interest-bearing account increased from \$5M to \$10M (pages 1, 6, 17, 18, Appendix B Table BOND-601-V5).
16-1	06/07/16	PA=4,590.0ac Incorporated the McDonald and Hilton tracts; relocated admin building and reconfigured ROM Pad.
18-1	06/01/18	Allowed temporary storage of PAG material to be placed at Ledbetter Pit. (This modification was never utilized by operator.)
18-2	08/22/18	Approved old parking lot area to become a PAG storage area and allow a haul road through the Gregory Property. (This modification was never utilized by operator.)
19-1	5/27/19	Converted Roberts OSA into East PAG cell to be constructed similarly to Johnny's PAG cell.
20-1	09/08/20	Allowed development of Mill Zone Phase 2, Expand East PAG into Phase 2, Expand Hayworth OSA into Phase 2, Construct 29 Pond, initiate 3 <sup>rd</sup> lift of TSF, and created 5 new borrow areas, and initiate construction of West PAG Phase 1.
19-2	12/14/22	PA=5,469.0ac, AA=3,747.0ac, FR=0.0ac, B=1,722.0ac. Adds land and allows the expansion of the processing plant and water treatment plant, expansion of pit shells to form one large pit, adds a 5 <sup>th</sup> lift to the TSF, construct West PAG and South OSA, and commence underground operations at the Horseshoe deposit.

Appendix B: Financial Assurance Schedule

\*The annual *Scheduled Increase* is accurate; however, the *Due by June 30* amount does not reflect any increases due to inflation or subsequent modifications which are unknown at this time; “1.000” is used as a placeholder, signifying neither inflation nor deflation. Additionally, the projected *Release Amount* is subject to Department approval.

	Pre-Production	YR1 (2018)	YR2 (2019)	YR3 (2020)	YR4 (2021)	YR5 (2022)
Scheduled Increase	\$30,100,000.00	\$2,966,000.00	\$3,174,000.00	\$5,393,000.00	\$4,177,000.00	\$7,717,000.00
<b>Due by June 30</b>		34,813,064.000	42,557,764.472	48,716,804.232	62,482,305.883	72,761,080.425
Inflation	1.018	1.023	1.018	1.012	1.041	1.000
Modification Increase	\$0.00	\$3,770,000.00	\$0.00	\$9,003,900.00	\$0.00	\$7,500,000.00
Projected Release	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total w/Inflation	\$34,813,064.00	\$39,383,764.47	\$43,323,804.23	\$58,305,305.88	\$65,044,080.42	\$80,261,080.42

	2023	2024	2025	2026	2027	2028
Scheduled Increase	\$6,441,000.00	\$4,687,000.00	\$6,800,000.00	\$0.00	\$0.00	\$2,210,000.00
<b>Due by June 30</b>	\$86,702,080.42	\$91,389,080.42	\$98,189,080.42	\$98,189,080.42	\$97,671,080.42	\$99,547,080.42
Inflation	1.000	1.000	1.000	1.000	1.000	1.000
Modification Increase	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Projected Release	\$0.00	\$0.00	\$0.00	\$518,000.00	\$334,000.00	\$664,000.00
Total w/Inflation	\$86,702,080.42	\$91,389,080.42	\$98,189,080.42	\$97,671,080.42	\$97,337,080.42	\$98,883,080.42

	2029	2030	2031	2032	2033	2034
Scheduled Increase	\$578,000.00	\$3,149,000.00	\$464,000.00	\$2,701,000.00	\$0.00	\$732,000.00
<b>Due by June 30</b>	\$99,461,080.42	\$102,303,080.42	\$102,760,080.42	\$103,767,080.42	\$103,730,080.42	\$102,768,080.42
Inflation	1.000	1.000	1.000	1.000	1.000	1.000
Modification Increase	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Projected Release	\$307,000.00	\$7,000.00	\$1,694,000.00	\$37,000.00	\$1,694,000.00	\$37,000.00
Total w/Inflation	\$99,154,080.42	\$102,296,080.42	\$101,066,080.42	\$103,730,080.42	\$102,036,080.42	\$102,731,080.42

## Appendix C: Overburden Management Plan

(stored in DHEC's ePermitting system due to size)

## Appendix D: Explosive Principal Management Plan

(stored in DHEC's ePermitting system due to size)

## Appendix E: Report of Feasibility Level Pit Slope Evaluation

(stored in DHEC's ePermitting system due to size)

## Appendix F: HGM Tailing and Process Water Management Permitting Design Report

(stored in DHEC's ePermitting system due to size)

## Appendix G: Duckwood TSF Detailed Design

(stored in DHEC's ePermitting system due to size)

## Appendix H: Emergency Preparedness and Response Plan

(kept on-site at Haile Gold Mine and updated annually, if needed)

Appendix I: Memorandum of Agreement  
(Revised Cultural Resources Management Plan)

(stored in DHEC's ePermitting system due to size)

## Appendix J: Tailings Distribution Design Report

(stored in DHEC's ePermitting system due to size)

# Appendix K: TSF Operation, Maintenance, and Inspection Manual

(stored in DHEC's ePermitting system due to size)

## Appendix L: TSF Emergency Action Plan

(stored in DHEC's ePermitting system due to size)

## Appendix M: HGM Reclamation Plan

(stored in DHEC's ePermitting system due to size)

## Appendix N: HGM PAG OSA and Contact Water Ponds Detailed Design Report

(stored in DHEC's ePermitting system due to size)

# Appendix O: Groundwater and Surface Water Monitoring Plan

(stored in DHEC's ePermitting system due to size)

## Appendix P: TSF Wildlife Monitoring, Reporting, and Response Plan

(stored in DHEC's ePermitting system due to size)

# Appendix Q: Environmental Monitoring and Management Plan

(stored in DHEC's ePermitting system due to size)

## Appendix R: Adaptive Management Plan

(stored in DHEC's ePermitting system due to size)

## Appendix S: Modification Details (Appendix A of the Mod 19-2 Application)

(stored in DHEC's ePermitting system due to size)

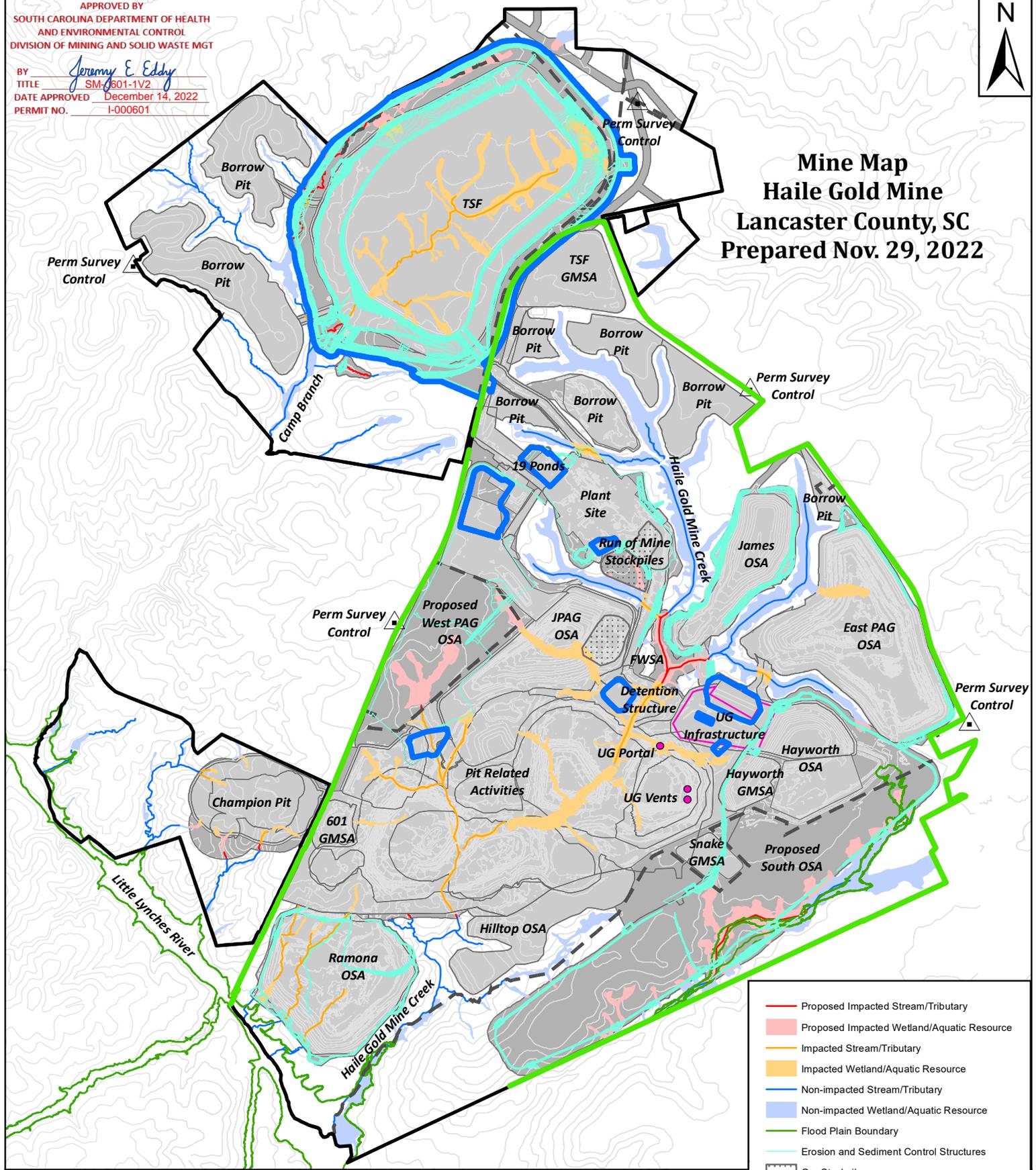
# Appendix T: TSF Confirmation Sampling and Mitigation Plan

(To be approved)

BY Jeremy E. Eddy  
 TITLE SM 601-1V2  
 DATE APPROVED December 14, 2022  
 PERMIT NO. I-000601



**Mine Map**  
**Haile Gold Mine**  
**Lancaster County, SC**  
**Prepared Nov. 29, 2022**



- Proposed Impacted Stream/Tributary
- Proposed Impacted Wetland/Aquatic Resource
- Impacted Stream/Tributary
- Impacted Wetland/Aquatic Resource
- Non-impacted Stream/Tributary
- Non-impacted Wetland/Aquatic Resource
- Flood Plain Boundary
- Erosion and Sediment Control Structures
- Ore Stockpile
- UG Locations
- Permitted
- Affected
- Proposed Permit Boundary
- Permit Boundary
- Wildlife Fences
- Security Fences

Coordinate System: NAD27 State Plane  
 Contour interval: 5 meters  
 Prepared by: NR/DP

