



S.C. Department of Health and
Environmental Control

MINE OPERATING PERMIT

PART I:

Culclasure Farm Mine Culclasure Farm Tract, LLC

Culclasure Farm Tract, LLC, a corporation, has been granted a Mine Operating Permit, Mine Permit Number I-002093 to operate the Culclasure Farm 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.

DRAFT

JOAN F. LITTON, DIRECTOR
DIVISION OF MINING AND SOLID WASTE MANAGEMENT

PERMIT NUMBER: I-002093
ORIGINALLY ISSUED: DRAFT
MODIFIED: Not Applicable

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.

I-002093

Culclasure Farm Tract, LLC

Home Office Address: Culclasure Farm Tract, LLC
1201 Main Street, Suite 1980
Columbia, SC 29201

Local Office Address: Culclasure Farm Tract, LLC
1201 Main Street, Suite 1980
Columbia, SC 29201

Address for Official Mail: Culclasure Farm Tract, LLC
1201 Main Street, Suite 1980
Columbia, SC 29201

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]:

Thomas Gordon
Operations Manager

Telephone: 803-748-1224
Fax: 803-748-1216

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

Latitude: 33.7363

Longitude: -80.9512

DESCRIBE LOCATION: The mine is located in Calhoun County approximately 8.5 miles east of Swansea, SC. Specifically the site is located north and south of Horsefeathers Lane, approximately 0.5 mile east of the junction of Horsefeathers Lane with US Hwy 21.

Part II: MINE OPERATIONS

Culclasure Farm Tract, LLC, also referred to as the operator, is permitted to mine sand/clay, sand, and gravel at the Culclasure Farm Mine. The maximum depth to the floor of Pit #1 will be 44 feet below ground surface to an elevation of 242 feet mean sea level and Pit #2 will be 60 feet below ground surface to an elevation of 250 feet mean sea level. Mining will take place on a tract of land owned by the referenced operator. This tract of land is identified in the submitted *Land Entry Agreement* (LEA).

MINE/PIT CHARACTERIZATION: Clearing and grubbing operations will be performed by an excavator and front-end loader equipped with a root rake. Cleared trees and brush will either be used to form temporary brush barriers for erosion and sediment control or burned. Topsoil will be removed by a loader or excavator and stockpiled into berms around pit perimeters. Adequate amounts of topsoil will be retained for reclamation and excess sold. The exposed sand will be mined by front-end loader and excavator and loaded into haul trucks and taken to process plant.

PROCESSING PLANT LOCATED ON MINE SITE: A screen plant will wash sand for concrete and mortar sand and stockpile for sale to customers.

MINE DEWATERING: Mining operations are anticipated to have a shallow penetration into the water table. Groundwater collected in the pit sumps will be routed for discharge to the sediment basin/NPDES outfall by gravity and/or pumping.

BLASTING: Blasting operations are not permitted at this mine site.

SIGNIFICANT CULTURAL OR HISTORICAL SITES: The State Historic Preservation Office (SHPO) requested a cultural resources reconnaissance survey be conducted on the affected lands prior to disturbance (Reference SHPO Project No. 15-ED0162, letter dated October 4, 2017, email dated October 6, 2017). Culclasure Farm Tract LLC is required to provide a SHPO letter of concurrence for review and approval. Note Part X: *Additional Terms and Conditions*, No. 1 of this Mine Operating Permit.

VISUAL SCREEN: The mine permit area is a minimum 1,300 feet east of US Highway 21 and 2,300 west of I-26. The combination of distance and vegetation effectively screens the mine from these highways. Horsefeathers Lane transects the permitted area. Vehicles traveling Horsefeathers Lane will have a limited view of the mine due to an earthen berm providing some visual screening along this road. Undisturbed vegetated buffers of varying widths also provide screening around the mine perimeter (see mine map).

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.

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 the DHEC within 30 days of the change of ownership.

Land Owner(s) as Listed on *Land Entry Agreement(s)*:
Culclasure Farm Tract, LLC; Calhoun County TMS #049-00-01-010

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

OWNED 68.0 LEASED 0.0 TOTAL 68.0

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 affects to the surrounding environment.

AFFECTED LAND: 40.3 acres of land are to be affected by Culclasure Farm Tract, LLC under the current mine plan, 23.3 of the affected acres are currently bonded [affected land not bonded includes the vegetative filter of Pit #1 (5.8 ac.) and Pit #2 (11.2 ac.)]. 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 maps (SM-2093-1V1, SM-2093-2V1, SM-2093-3V1).

FUTURE RESERVES: 0.0 acres are identified as future reserves and are specified on the mine site map. Prior to the initiation of activity in future reserves, the operator shall submit detailed mine and reclamation plans to DHEC for approval.

BUFFER AREAS: 27.7 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 disturbance of the buffer areas (i.e. removal of timber) requires this *Mine Operating Permit* to be modified **prior** to any such disturbance.

TOTAL PERMITTED AREA: 68.0 acres as submitted on the *Land Entry Agreement(s)*.

Part IV: MAPS

The permitted maps are listed herein. The maps are dated and further identified with DHEC assigned map number as listed and are part of the operating permit.

SCDHEC Map #	Map Name	Prepared by:	Map Date
Drawing No. 1 of 7	<i>Base Map of Proposed Mine Site</i>	Steven F. Howiler, Howiler and Associates	Dated February 8, 2016 Rev.1 dated April 13, 2017
Drawing No. 2 of 7	<i>Initial Infrastructure Development</i>	Steven F. Howiler, Howiler and Associates	Dated January 20, 2017, Rev.1, dated May 24, 2017 Rev.2, dated Sept. 20, 2017
SM-2093-1V1 Drawing No. 3 of 7	<i>Pit #1 Mine Plan</i>	Steven F. Howiler, Howiler and Associates	Dated January 20, 2017 Rev.1 dated April 13, 2017
SM-2093-2V1 Drawing No. 4 of 7	<i>Pit #2 Mine Plan To Elev.= 310' & 276'</i>	Steven F. Howiler, Howiler and Associates	Dated January 20, 2017 Rev.1&2 dated April 13, 2017
SM-2093-3V1 Drawing No. 5 of 7	<i>Pit #2 Mine Plan To Elev.= 257' (Final)</i>	Steven F. Howiler, Howiler and Associates	Dated January 20, 2017 Rev.1 dated April 13, 2017
Drawing No. 6 of 7	<i>Erosion & Sedimentation Control Details</i>	Steven F. Howiler, Howiler and Associates	Dated January 20, 2017 Rev.1&2 dated April 13, 2017 Rev.3 dated June 20, 2017
RM-2093-1V1 Drawing No. 7 of 7	<i>Reclamation Map</i>	Steven F. Howiler, Howiler and Associates	Dated February 8, 2016 Rev.1 dated April 13, 2017

Part V: RECLAMATION BOND

The Reclamation Bond is based upon the total affected acres. Pursuant to Section 48-20-70 and R.89-200, the reclamation bond for this mining permit is set at \$25,000.00. The reclamation bond shall remain in force and continuous throughout the life of the mining operation and shall only be released, partially or in full, back to the operator after the operator has completed reclamation in accordance with the approved *Reclamation Plan* and the minimum standards in R.89-330.

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 in western Calhoun County. Horsefeathers Lane, a county maintained unpaved road connecting US Hwy 21 and Big Beaver Creek Road, transects the permitted area. Several residences are located to the east and accessed by Horsefeathers Lane. The remainder of the adjacent areas are forested. Topography at the site ranges from 340' MSL to 170' MSL. Wetlands associated with Sembly Branch are located within the permitted area east and south of the affected area. Big Beaver Creek is approximately 800 to 1000 feet northwest of the site. The vegetation consists mostly of naturally regenerated oak, gum, and pines. Soils consist mainly of Ailey-Vaucluse (AmE), Totness (To), and Troup (TrB). Wildlife is typical of the area consisting of deer, turkey, and small game.

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.

Gates will be installed at the plant entrance and haul roads to the mine site and kept locked during inactive periods. *Warning* and/ or *Danger* signs shall be posted around the perimeter of the property. An earthen berm and/or vegetative buffer will limit access from other areas.

The operator shall minimize the potential of accidental falls by mining on a slope (not vertical highwalls). The operator shall grade side slopes as soon as feasible as excavation progresses.

Traffic on Horsefeathers Lane will maintain the right-of-way at all times. Stop signs will be placed on the haul road at both sides of Horsefeathers Lane (connecting Pit #1 and Pit #2) requiring mine traffic to come to a complete stop before crossing. A stop sign will also be placed at the plant entrance road exit at Horsefeathers Lane.

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 must be removed from the site and disposed 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, forest or recreational areas near this mine site.

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

The operator shall comply with the NPDES discharge permit and *Stormwater Pollution Prevention Plan* developed for the mine.

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

Mining will be conducted on a slope (no highwalls). Final slopes will be no steeper than 3H:1V to minimize potential for landslides or unstable mine walls. The operator is responsible for maintaining stable mine walls and appropriate setbacks to prevent significant slumping that may encroach into non-permitted lands.

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

Acid water is not anticipated to be generated from the oxidation of existing minerals currently found on this site.

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

The mine operator will use appropriate measures (i.e. water truck, dust suppressants, etc.) 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 blowing dust.

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 three (3) years or as specified by DHEC. The operator shall furnish copies of the records upon request to DHEC.

4) PERMIT MODIFICATIONS: Pursuant to Section 48-20-80, the operator may modify the permit and/or *Reclamation Plan* 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.

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*.

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 within 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 request from DHEC shall be made in writing to the operator with 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

1. If archaeological materials are encountered prior to or during the construction of mine facilities or during mining, the S.C. Department of Archives and History and DHEC should be notified immediately. Archaeological materials consist of any items, fifty years or older, which were made or used by humans. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, oyster shell, worked wood, bone and stone, metal and glass objects, human skeletal remains, and concentrations of charcoal and stones below the ground surface. These materials may be present on the ground surface and/or under the surface of the ground.

Culclasure Farm Tract LLC is required to conduct a cultural resources reconnaissance survey on the affected lands prior to disturbance (Reference SHPO Project No. 15-ED0162, letter dated October 4, 2017, email dated October 6, 2017). Prior to any land disturbance within the permitted area DHEC must be provided with a SHPO letter of concurrence for review and approval.
2. Temporary or permanent placement of refuse and debris from off-site locations is prohibited. Topsoil fill approved by DHEC may be brought in from off-site sources only for the purposes of mine land reclamation.
3. In the future, if determined to be necessary by the Department, an appropriate fence will be installed around the affected area.
4. Upon receipt of a water well supply complaint, DHEC is responsible for determining if dewatering activities at the Culclasure Farm Mine caused the problem. During the determination process, the operator shall immediately supply the well owner with a temporary water supply until DHEC completes the investigation of the water supply well problem and makes a determination. If DHEC determines the Culclasure Farm Mine caused the problem, the operator shall be responsible for repairing, deepening or re-drilling such wells.
5. Prior to any mining related activities within wetlands, Culclasure Farm LLC must provide either (1) the required federal and state permits or (2) a written statement from the Army Corps stating no permit is required.
6. As recommended by the South Carolina Department of Natural Resources, significant impacts to the aquatic community in Sembly Branch through the entrainment of fish and other organisms shall be minimized by the following stipulations (see Drawing No. 2 of 7, *Initial Infrastructure Development*):
 - To minimize the entrainment of fish and other aquatic organisms, pump intake velocities at the Plant Freshwater Makeup Pumping Station should not exceed 0.5 feet per second. The in-take will be protected by a +/- 0.25 inch mesh in-take screen.
 - Excavation/Construction activities must not occur in Sembly Branch or adjacent wetlands during fish spawning season from March through June due to its negative impacts on eggs and reproduction activities.
7. Pumping from the plant freshwater makeup pumping station at Sembly Branch is limited to 3,000,000 gallons per month. The operator shall maintain a pumping log documenting the frequency, rate, and volume.

APPENDIX A

MODIFICATIONS TO MINE PERMIT I-002093

NUMBER	DATE	DESCRIPTION OF MODIFICATION (PA= Permitted Acreage; AA= Affected Acreage; FR= Future Reserves Acreage, B= Buffer Acreage)
	DRAFT	Permit issued; PA = 68.0 ac., AA = 40.3 ac.(23.3 ac. bonded), FR= 0.0 ac., B = 27.7 ac.