

Appendix O

## **Haile Gold Mine SEIS Cumulative Impacts**

---

# Contents

	Page
<b>O.1</b>	<b>Introduction .....O-1</b>
<b>O.2</b>	<b>Current Mining Projects.....O-1</b>
O.2.1	South Carolina..... 0-1
O.2.1.1	Chester County ..... 0-1
O.2.1.2	Chesterfield County ..... 0-1
O.2.1.3	Fairfield County ..... 0-2
O.2.1.4	Kershaw County..... 0-2
O.2.1.5	Lancaster County..... 0-2
O.2.1.6	Richland County ..... 0-3
O.2.1.7	York County ..... 0-3
<b>O.3</b>	<b>Current Industrial Development Projects.....O-3</b>
O.3.1	South Carolina..... 0-3
O.3.1.1	Chester County ..... 0-3
O.3.1.2	Kershaw County..... 0-3
O.3.1.3	Lancaster County..... 0-4
O.3.1.4	Sumter County..... 0-4
O.3.1.5	York County ..... 0-4
O.3.2	North Carolina..... 0-5
O.3.2.1	Mecklenburg County ..... 0-5
O.3.2.2	Scotland County ..... 0-5
<b>O.4</b>	<b>Current Conservation Projects .....O-5</b>
O.4.1	South Carolina..... 0-5
O.4.1.1	Lancaster County..... 0-5
<b>O.5</b>	<b>Current Energy Projects .....O-6</b>
O.5.1	South Carolina and North Carolina ..... 0-6
O.5.1.1	Chester, Fairfield, Kershaw, Lancaster, and York Counties in South Carolina, and Alexander, Burke, Caldwell, Catawba, Gaston, Iredell, Lincoln, McDowell, and Mecklenburg Counties in North Carolina ..... 0-6
O.5.2	North Carolina..... 0-6
O.5.2.1	Anson County ..... 0-6
<b>O.6</b>	<b>Reasonably Foreseeable Future Mining Projects.....O-7</b>
O.6.1	South Carolina..... 0-7
O.6.1.1	Chesterfield County..... 0-7

**O.7 Reasonably Foreseeable Future Industrial Development Projects .....O-7**

    O.7.1 South Carolina..... O-7

        O.7.1.1 Florence County ..... O-7

        O.7.1.2 Kershaw County..... O-7

    O.7.2 North Carolina..... O-7

        O.7.2.1 Mecklenburg County ..... O-7

**O.8 Literature Cited .....O-8**

# O. Haile Gold Mine SEIS Cumulative Impacts

---

## O.1 Introduction

This appendix provides brief descriptions of ongoing industrial development projects and reasonably foreseeable future industrial development projects with the potential to contribute cumulatively to impacts associated with the proposed Haile Gold Mine expansion (proposed project). This appendix supports the discussion of cumulative impacts in Chapter 5, *Cumulative Impacts*, of the SEIS. The information for the projects described in the appendix was current as of May 2020, during preparation of the SEIS.

## O.2 Current Mining Projects

### O.2.1 South Carolina

#### O.2.1.1 Chester County

##### **Chester Quarry**

Chester Quarry is an active granite quarry in Chester County operated by Luck Stone Corp. (SCDHC 2020).

#### O.2.1.2 Chesterfield County

##### **Chesterfield Quarry**

Chesterfield Quarry is an active granite quarry in Chesterfield County operated by Martin Marietta Materials Inc. (SCDHC 2020).

##### **Jefferson Quarry**

Jefferson Quarry is an active granite quarry in Chesterfield County operated by Hanson Aggregates Southeast LLC (SCDHC 2020).

##### **Lynches River Quarry**

Lynches River Quarry is an active granite quarry in Chesterfield County operated by American Materials Company LLC (SCDHC 2020).

##### **Pageland Quarry**

Pageland Quarry is an active granite quarry in Chesterfield County operated by Hanson Aggregates Southeast LLC (SCDHC 2020).

### **O.2.1.3 Fairfield County**

#### **Blair Quarry**

Blair Quarry is an active granite quarry in Fairfield County operated by Vulcan Construction Materials LLC (SCDHC 2020).

#### **Fair View Mine**

Fair View Mine is an active granite mine in Fairfield County operated by Vulcan Construction Materials LLC (SCDHC 2020).

#### **Rion Quarry**

Rion Quarry is an active granite quarry in Fairfield County operated by Martin Marietta Materials Inc. (SCDHC 2020).

#### **Winnsboro Quarry**

Winnsboro Quarry is an active granite quarry in Fairfield County operated by Winnsboro Crushed Stone LLC (SCDHC 2020).

### **O.2.1.4 Kershaw County**

#### **Kershaw Mine**

Kershaw Mine is an active granite mine in Kershaw County operated by Georgia Stone Industries Inc. (SCDHC 2020).

#### **Kershaw Quarry**

Kershaw Quarry is an active granite quarry in Kershaw County operated by Luck Stone Corp. (SCDHC 2020).

#### **South Carolina Pink**

South Carolina Pink is an active granite quarry in Kershaw County operated by Georgia Stone Industries Inc. (SCDHC 2020).

### **O.2.1.5 Lancaster County**

#### **Congaree Quarry**

Congaree Quarry is an active granite quarry in Lancaster County operated by Georgia Stone Industries Inc. (SCDHC 2020).

### **O.2.1.6 Richland County**

#### **Columbia Quarry**

Columbia Quarry is an active granite quarry in Richland County operated by Vulcan Construction Materials LLC (SCDHC 2020).

#### **Dreyfus Quarry**

Dreyfus Quarry is an active granite quarry in Richland County operated by Vulcan Construction Materials LLC (SCDHC 2020).

#### **North Columbia Quarry**

North Columbia Quarry is an active granite quarry in Richland County operated by Martin Marietta Materials Inc. (SCDHC 2020).

### **O.2.1.7 York County**

#### **Lowry's Quarry**

Lowry's Quarry is an active granite quarry in York County operated by Hanson Aggregates Southeast LLC (SCDHC 2020).

#### **Rock Hill Quarry**

Rock Hill Quarry is an active granite quarry in York County operated by Martin Marietta Materials Inc. (SCDHC 2020).

## **O.3 Current Industrial Development Projects**

### **O.3.1 South Carolina**

#### **O.3.1.1 Chester County**

##### **Jones-Hamilton Co.**

Jones-Hamilton Co., a manufacturer and marketer of specialty chemicals including sodium bisulfate and muriatic acid, is expanding its plant in Chester County to accommodate more production. The facility was constructed in 2014 and intended to generate 15 jobs (SCDC 2012). The new expansion will bring total jobs up to 24 production operators, warehouse, maintenance and administration personnel (CCED 2019).

#### **O.3.1.2 Kershaw County**

##### **Canfor Southern Pine**

Canfor Southern Pine, a manufacturer of Southern yellow pine lumber, is investing \$40 million to upgrade its existing sawmill in Camden, South Carolina. The expansion will include installation of a

new planer mill and new equipment throughout the sawmilling operation to increase production capacity (SCDC 2018).

### **INVISTA**

INVISTA, a producer of polymers and carpet fibers, is investing \$80 million in fiber production equipment and other modernization projects at its Camden production facility. The expansion plans are expected to create 20 new jobs by 2025. INVISTA has also announced the hiring of 200 new positions (SCDC 2015a).

### **Suominen**

Suominen, a supplier of nonwoven products, is expanding its manufacturing operations in Kershaw County over the coming years. Suominen will add a wet-laid production line to its existing Midlands facility located at 500 Chestnut Street in Bethune. This expansion represents the largest single initiative in Suominen's current growth investment program and will create new job positions (SCDC 2015b).

## **O.3.1.3 Lancaster County**

### **Fancy Pokket Corporation**

Fancy Pokket Corporation, a Canada-based manufacturer of bakery products, is establishing a new \$13 million production facility in Lancaster County. The 57,000-square-foot baking plant at 269 Nebo Road in Lancaster County was planned to be unveiled in 2014 (SCDC 2013a), but encountered delays stretching over 5 years. The project began again in 2019 (The Lancaster News 2019). The new facility will help the company move toward its plans to eventually ship products nationally and internationally.

## **O.3.1.4 Sumter County**

### **Continental Tire the Americas**

Continental Tire the Americas (CTA) is expanding its tire plant in Sumter County to bring in new technology and meet the growing demand from retail and manufacturers. The facility is located at a greenfield site off of US Highway 251. The first phase of expansion started in 2013 and increased production capacity to about 4 million tires per year in 2017. The second phase of expansion is expected to further increase production capacity to 7 million tires per year (Rubber and Plastics News 2019). In total, the project is expected to add 1,700 new jobs by 2021 (SCDC 2011).

## **O.3.1.5 York County**

### **Silcotech North America, Inc.**

Silcotech North America, Inc. is investing an additional \$2.5 million in its silicone manufacturing facility in East York Industrial Park in York County. The manufacturing facility was constructed in 2014 with an initial investment of \$3.5 million (SCDC 2013b). The additional investment will create jobs and allow the firm to double the number of liquid silicone rubber injection molding cells at the facility (Rubber and Plastics News 2016).

## **O.3.2 North Carolina**

### **O.3.2.1 Mecklenburg County**

#### **MetLife, Inc.**

MetLife, Inc., a life insurance and employee benefits company, is expanding its Global Technology campus in Cary. The new building will bring more than 500 jobs to its Cary location (MetLife 2017). The new building will be home to MetLife's Global Innovation Center.

### **O.3.2.2 Scotland County**

#### **FCC, LLC**

FCC (North Carolina), LLC, a manufacturer of automotive components, is further expanding its operations in Laurinburg, Scotland County. The \$1 million investment will move part of FCC's production from Japan to North Carolina and will create 28 jobs over the next 3 years (The Laurinburg Exchange 2017).

## **O.4 Current Conservation Projects**

### **O.4.1 South Carolina**

#### **O.4.1.1 Lancaster County**

##### **Carolina Heelsplitter Conservation Bank**

In 2009, an 811-acre Carolina Heelsplitter Conservation Bank was created in Lancaster County by Environmental Bank & Exchange as part of an integrated solution to balance the needs for economic development with the conservation needs of the heelsplitter. The bank is sited within the Flat Creek watershed, and its service area includes watersheds of North Carolina and South Carolina that house known populations of heelsplitters (The Conservation Fund 2010). As part of the compensatory mitigation measures committed to in the 2014 FEIS, three additional conservation bank sites have been preserved in perpetuity, totaling approximately 4,389 acres for the long-term stewardship of Carolina heelsplitters. These sites are Rainbow Ranch, Cooks Mountain, and Goodwill Plantation.

## **O.5 Current Energy Projects**

### **O.5.1 South Carolina and North Carolina**

#### **O.5.1.1 Chester, Fairfield, Kershaw, Lancaster, and York Counties in South Carolina, and Alexander, Burke, Caldwell, Catawba, Gaston, Iredell, Lincoln, McDowell, and Mecklenburg Counties in North Carolina**

##### **Catawba-Wateree Hydroelectric Project**

The Catawba-Wateree Hydroelectric Project, operated by Duke Energy, is a hydroelectric power project made up of 13 hydropower stations and 11 reservoirs in both South Carolina and North Carolina. The hydroelectric power project provides 819 megawatts of renewable power. The Catawba-Wateree Hydroelectric Project went through Federal Energy Regulatory Commission (FERC) relicensing in 2006 and an Environmental Impact Statement was prepared analyzing impacts in the 14 affected counties (Duke Energy 2020). FERC also prepared a Catawba-Wateree Recreation Management Plan in 2017, which commits to 89 public projects and enhancements at 32 existing recreation areas over the course of 20 years, beginning in 2018 (Catawba Regional Council of Governments 2017).

### **O.5.2 North Carolina**

#### **O.5.2.1 Anson County**

##### **Catawba Biogas**

Catawba Biogas, an operator of renewable energy facilities, will locate a new poultry-waste-to-natural-gas conversion plant in Anson County. The company will invest at least \$15 million to develop the site near the Pee Dee Electric gas turbine plant east of Lilesville (Biomass Magazine 2018). The facility will start operations in 2019 and add 8 to 10 jobs.

##### **GrowGreen Power, Inc.**

GrowGreen Power, Inc., a combination agriculture and green power company, has selected a site in Anson County to build a new plant. The company intends to construct a 50-acre greenhouse and 46.3-megawatt cogeneration plant (Biomass Magazine 2011). The combination of renewable energy production with hydroponic crops will create a sustainable system capable of producing up to 30 times more crop than traditional farming. The project represents a \$250 million investment that is expected to generate 300 jobs. The project was approved by Anson County Commissioners in 2011; however, no additional information on the construction and operation timeline is available.

## **O.6 Reasonably Foreseeable Future Mining Projects**

### **O.6.1 South Carolina**

#### **O.6.1.1 Chesterfield County**

##### **Brewer Mine**

Pancontinental Resources Corporation (Pancon) executed an exclusive Mining Lease with Option to Purchase for the former Brewer Gold Mine property in February 2020 (Pancontinental Resources Corporation 2020). Pancon plans to commence mining exploration work at the Brewer Mine in the summer of 2020. The Brewer Gold Mine is located on the Carolina Slate Belt and was an operating gold mine from 1987–1995. The site was previously abandoned in 1999.

## **O.7 Reasonably Foreseeable Future Industrial Development Projects**

### **O.7.1 South Carolina**

#### **O.7.1.1 Florence County**

##### **McCall Farms, Inc.**

McCall Farms, Inc., a producer of southern canned and frozen vegetables, plans to expand existing operations in Florence County. McCall Farms, Inc. is making a \$50 million investment to install new production lines at the facility and increase productivity on existing lines. The expansion is expected to create 140 new jobs and take place in the second quarter of 2020 (SCDC 2019a).

#### **O.7.1.2 Kershaw County**

##### **GE Appliances**

GE Appliances, a Haier company, intends to create a new Manufacturing Center of Excellence to produce water heaters at an existing plant in Kershaw County. The company will invest \$60 million to renovate the existing refrigerator production plant into a water heater production facility with capacity for future growth. Water heater production operations are anticipated to begin in the fourth quarter of 2020 (SCDC 2019b).

### **O.7.2 North Carolina**

#### **O.7.2.1 Mecklenburg County**

##### **United Technologies Corporation**

United Technologies Corporation, a researcher, development, and manufacturer of high-technology products, plans to expand its North Carolina workforce by about 1,500 to 4,000 jobs as part of a 5-

year expansion initiative (Winston-Salem Journal 2018). The investment will allow United Technologies Corporation to expand capacity and further innovate for growth.

## O.8 Literature Cited

- Biomass Magazine. 2011. GrowGreen Power chooses NC for its greenhouse/biomass power plant. June 6, 2011. Available: <http://biomassmagazine.com/articles/5573/growgreen-power-chooses-nc-for-its-greenhouse-biomass-power-plant>. Accessed: May 21, 2020.
- Biomass Magazine. 2018. Catawba Biogas to build \$15 million facility in North Carolina. May 16, 2018. Available: <http://biomassmagazine.com/articles/15303/catawba-biogas-to-build-15-million-facility-in-north-carolina>. Accessed: May 21, 2020.
- Catawba Regional Council of Governments. 2017. Duke Energy's Catawba-Wateree Recreation Management Plan gets green light from Federal Energy Regulatory Commission. December 27, 2017. Available: <http://catawbacog.org/featured-news/duke-energy-s-catawba-wateree-recreation-management-plan-gets-green-light-from-federal-energy-regulatory-commission/>. Accessed: July 21, 2020.
- Chester County Economic Development (CCED). 2019. Jones-Hamilton Co. to Expand Plant in South Carolina. July 1, 2019. Available: <http://www.choosechester.com/news/jones-hamilton-co-to-expand-plant-in-south-carolina/>. Accessed: May 20, 2020.
- Conservation Fund, The. 2010. The Carolina Heelsplitter Conservation Bank (South Carolina). 5 pp.
- Duke Energy. 2020. Catawba-Wateree Relicensing. Last updated 2020. Available: <https://www.duke-energy.com/community/lakes/hydroelectric-relicensing/catawba>. Accessed: May 20, 2020.
- Lancaster News, The. 2019. Fancy Pokket finally firing up its factory. October 5, 2019. Available: <https://www.thelancasternews.com/content/fancy-pokket-finally-firing-its-factory>. Accessed: May 20, 2020.
- Laurinburg Exchange, The. 2017. FCC to add jobs, expand operation. July 4, 2017. Available: <https://www.laurinburgexchange.com/news/local-news-1/11211/fcc-to-add-jobs-expand-operation>. Accessed: May 21, 2020.
- MetLife. 2017. MetLife Breaks Ground on its Third Building in Cary, North Carolina. October 27, 2017. Available: <https://www.metlife.com/about-us/newsroom/2017/october/metlife-breaks-ground-on-its-third-building-in-cary--north-carol/>. Accessed: May 21, 2020.
- Pancontinental Resources Corporation. 2020. Carolina Gold: Brewer Gold Mine Fact Sheet Q2. 2 pp.
- Rubber and Plastics News. 2016. Demand prompts Silcotex expansion in S.C. March 11, 2016. Available: <https://www.rubbernews.com/article/20160311/NEWS/303079985/demand-prompts-silcotex-expansion-in-s-c>. Accessed: May 19, 2020.
- Rubber and Plastics News. 2019. Continental expanding South Carolina tire plant again. April 22, 2019. Available: <https://www.rubbernews.com/article/20190422/NEWS/190429991/continental-expanding-south-carolina-tire-plant-again>. Accessed: May 19, 2020.

- South Carolina Department of Commerce (SCDC). 2011. Continental Tire the Americas LLC announces new plant in Sumter County. October 6, 2011. Available: <https://sccommerce.com/news/continental-tire-americas-llc-announces-new-plant-sumter-county>. Accessed: July 31, 2013.
- South Carolina Department of Commerce (SCDC). 2012. Jones-Hamilton chooses Chester County for new plant. March 6, 2012. Available: <https://www.sccommerce.com/news/jones-hamilton-chooses-chester-county-new-plant>. Accessed: July 31, 2013.
- South Carolina Department of Commerce (SCDC). 2013a. Fancy Pokket Corporation establishing new facility in Lancaster County. June 6, 2013. Available: <https://www.sccommerce.com/news/fancy-pokket-corporation-establishing-new-facility-lancaster-county>. Accessed: July 31, 2013.
- South Carolina Department of Commerce (SCDC). 2013b. Silcotech North America Inc. establishing new facility in York County. Available: <https://www.sccommerce.com/news/silcotech-north-america-inc-establishing-new-facility-york-county>. Accessed: November 20, 2013.
- South Carolina Department of Commerce (SCDC). 2015a. INVISTA expanding Kershaw County operations. December 9, 2015. Available: <https://www.sccommerce.com/news/invista-expanding-kershaw-county-operations>. Accessed: May 19, 2020.
- South Carolina Department of Commerce (SCDC). 2015b. Suominen expanding Kershaw County manufacturing operations. June 2, 2015. Available: <https://www.sccommerce.com/news/suominen-expanding-kershaw-county-manufacturing-operations>. Accessed: May 20, 2020.
- South Carolina Department of Commerce (SCDC). 2018. Canfor Southern Pine upgrading its Kershaw County facility. May 3, 2018. Available: <https://www.sccommerce.com/news/canfor-southern-pine-upgrading-its-kershaw-county-facility>. Accessed: May 20, 2020.
- South Carolina Department of Commerce (SCDC). 2019a. McCall Farms expanding Florence County operations. October 17, 2019. Available: <https://www.sccommerce.com/news/mccall-farms-expanding-florence-county-operations-1>. Accessed: May 19, 2020.
- South Carolina Department of Commerce (SCDC). 2019b. GE Appliances expanding Kershaw County operations with new Manufacturing Center of Excellence. September 12, 2019. Available: <https://www.sccommerce.com/node/6942>. Accessed: May 20, 2020.
- South Carolina Department of Health and Environmental Control (SCDHEC). 2020. South Carolina Active Mines Viewer. GIS map web application. Available: <https://gis.dhec.sc.gov/activeminesviewer/>. Accessed: September 3, 2020.
- Winston-Salem Journal. 2018. United Technologies plans ambitious 35,000-job, \$15-billion expansion. Available: [https://www.journalnow.com/news/local/united-technologies-plans-ambitious--job--billion-expansion/article\\_87d2fd92-5eb3-11e8-908d-ff95bdaeb813.html](https://www.journalnow.com/news/local/united-technologies-plans-ambitious--job--billion-expansion/article_87d2fd92-5eb3-11e8-908d-ff95bdaeb813.html). Accessed: May 21, 2020.