



US Army Corps  
Of Engineers  
Wilmington District

# PUBLIC NOTICE

Issue Date: September 17, 2020  
Comment Deadline: October 16, 2020  
Corps Action ID Number: SAW-2019-01042

The Wilmington District, Corps of Engineers (Corps) received an application from Sibelco North America, Incorporated, seeking Department of the Army authorization to discharge fill material into 0.274 acre of wetlands and 347 linear feet of stream channel, associated with the expansion of an existing waste area at the Brushy Creek Mine (project known as Ollis Waste Area Expansion), in Spruce Pine, in Avery County, North Carolina.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at: <https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/>

**Applicant:** Sibelco North America, Incorporated  
Mr. Jeff Ferguson  
136 Crystal Drive  
Spruce Pine, North Carolina 28777

**AGENT (if applicable):** ClearWater Environmental Consultants, Incorporated  
Attn: Clement Riddle  
32 Clayton Street  
Asheville, North Carolina 28801

## Authority

The Corps evaluates this application and decides whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of the following Statutory Authorities:

- ☒ Section 404 of the Clean Water Act (33 U.S.C. 1344)
- ☐ Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- ☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

## Location

Location Description: The Ollis Waste Area Expansion is located northeast of downtown Spruce Pine in Avery County, North Carolina. To access the site from Asheville, take US Highway 19/23 North (Future I-26) to Exit 9 (US Highway 19). Continue on US Highway 19 East past Spruce

Pine and turn right onto Brushy Creek Road. The mine and project site are located north of Brushy Creek Road near the Avery County Airport. A site vicinity map and USGS topographic map are attached for review (Figures 1 and 2).

Project Area (acres):	56-acres	Nearest Town:	Spruce Pine
Nearest Waterway:	Brushy Creek	River Basin:	French Broad
Latitude and Longitude:	35.952972 N, -81.983778 W		

### **Existing Site Conditions**

The project site consists of an operational mine, a reclaimed mine, and forested areas. The existing mine and forested areas can be observed in the aerial imagery (Figure 3). The surrounding land uses are rural residential and forested. The site is relatively steep with elevations ranging from 2,796 feet to 3,052 feet above mean sea level (MSL).

Freshwater habitats include the streambeds and banks of unnamed tributaries to Brushy Creek, and wetlands. There are approximately 957 linear feet of stream channel within the project boundary. In general, these tributaries flow north to south and eventually into Brushy Creek and the North Toe River. There are approximately 0.328 acres of wetlands within the project area. Streams and wetlands within the project boundary are bordered by riparian forest. ClearWater Environmental Consultants (CEC) used the North Carolina Stream Assessment Method (NCSAM) and the North Carolina Wetland Assessment Method (NCWAM) to evaluate the quality of water resources on site. The results indicated that stream ratings ranged from low to medium to high and wetlands had both low and high ratings.

### **Applicant's Stated Purpose**

As stated by the applicant, the basic project purpose of the proposed project is to mine and process quartz. More specifically, the overall project purpose of the proposed project is to expand existing areas for the disposal of mining waste including quartz processing tailings so mining of quartz can continue.

### **Project Description**

The Spruce Pine mining district is known to contain deposits of gems and minerals, and some of the purest quartz deposits known in the world. Small mines produced gemstones, kaolin, feldspar, quartz, and mica in the late 1880's and early 1900's. Gemstone mining proved unsustainable, and the move away from mica-based electrical conductors to quartz-based semiconductors caused many small mines to close. Development of the railroad caused the town of Spruce Pine to grow and become the industrial center of the county, as well as, open the area to large-scale mining operations. Mineral resources currently mined in this district include mica, feldspar, and quartz. Mica, to a much smaller extent, is also still mined. Two mining companies in Spruce Pine (Sibelco North America, Incorporated and The Quartz Corporation) supply the majority of the world's high purity quartz market which is used for solar, semiconductor and fiber optic markets.

The proposed stream and wetland impacts will allow for expansion of the existing mine pit and provide a location to dispose of approximately 3.3 million tons of mining tailing produced by the Brushy Creek Mine facility. The waste area expansion would allow approximately 17.3 years of additional capacity for the operation of the Brushy Creek Mine by providing a location to dispose of mining waste material, referred to here as “tailings.” The mining waste material will consist of a mixture of feldspar sand with tailings consisting primarily of clays, sand and mica. Additionally, this material has a relatively high initial moisture content (>20%). As such, after the tailings are loaded and transported to the dump they must be allowed to dry through a combination of mechanical mixing and exposure to the atmosphere. Once suitably dry, the material is spread into 8 to 10-inch lifts. These lifts are then mechanically compacted to a minimum of 95% of the Standard Proctor maximum dry density. Below is a summary of the proposed stream and wetland impacts.

#### ***Stream Impacts***

<b>Impact Number</b>	<b>Length</b>
1 (S4)	197 LF
2 (S3 Reach 1)	150 LF
<b>Total</b>	<b>347 LF</b>

#### ***Wetland Impacts***

<b>Impact Number</b>	<b>Area AC</b>
1 (W2)	0.049
2 (W16)	0.035
3 (W17)	0.190
<b>Total</b>	<b>0.274 AC</b>

### **Avoidance and Minimization**

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

The ore required for the continued operation of the mine and processing plants is a rare commodity and exists only in a very few locations in the world. Sibelco has no control over the location of the ore within the mine boundary and only identifies its location after extensive drilling. Sibelco intends to mine all ore that meets the quality requirements for various products; therefore, avoidance of jurisdictional waters (with ore beneath) is difficult because the ore does not exist in other places. Additionally, as “expansion” implies, the Ollis Waste Area Expansion is located adjacent to an existing waste disposal area. Complete avoidance of streams and wetlands in this location is not possible due to topographic constraints. The site has been planned to avoid streams and wetlands to the maximum extent practicable, while still fulfilling the purpose of the project. The table below summarizes the total avoidance and minimization that has taken place within the project boundaries.

<b>Feature</b>	<b>Amount Avoided and Minimized</b>	<b>Percent Avoided and Minimized</b>
Streams	610 LF	64
Wetlands	0.054 Ac	16

## Compensatory Mitigation

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

Upon completion and implementation of all practical avoidance and minimization efforts, 347 linear feet of stream channel and 0.274 acres of wetlands impacts associated with the Ollis Waste Area Expansion are unavoidable. Results from NCSAM and NCWAM evaluation of the proposed impact areas are indicated below.

Sibelco proposes to mitigate for the balance of unavoidable impacts (approximately 347 linear feet of “cold” stream habitat and 0.274 acres of forested wetland) through payment into the NCDMS in-lieu fee program. By letter dated July 23, 2020, NCDMS has indicated they are willing to accept payment for impacts associated with the Ollis Waste Area Expansion.

### *Proposed Stream Mitigation Credits*

<b>Impact Number</b>	<b>Length</b>	<b>Type</b>	<b>NC SAM Rating</b>	<b>Proposed Mitigation Ratio</b>	<b>Total Credits</b>
1 (S4)	197 LF	Intermittent	MEDIUM	1:1	197
2 (S3 Reach 1)	150 LF	Perennial	HIGH	2:1	300
<b>Total</b>	<b>347 LF</b>				<b>497</b>

### *Proposed Wetland Mitigation Credits*

<b>Impact Number</b>	<b>Area (AC)</b>	<b>Type</b>	<b>NC WAM Rating</b>	<b>Proposed Mitigation Ratio</b>	<b>Total Credits</b>
1 (W2)	0.049	Headwater Forest	HIGH	2:1	0.098
14 (W16)	0.035	Basin	LOW	1:1	0.035
15 (W17)	0.190	Basin	LOW	1:1	0.190
<b>Total</b>	<b>0.274</b>				<b>0.323</b>

## Essential Fish Habitat

The Corps’ determination is that the proposed project would not affect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

## Cultural Resources

Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the 2005 Revised Interim Guidance for Implementing Appendix C, the District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that no historic properties, nor properties eligible for inclusion in the

National Register, are present within the Corps' permit area; therefore, there will be no historic properties affected. The Corps subsequently requests concurrence from the SHPO (or THPO).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

### **Endangered Species**

Pursuant to the Endangered Species Act of 1973, the Corps reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps determines that the proposed project would not affect federally listed endangered or threatened species or their formally designated critical habitat.

### **Other Required Authorizations**

The Corps forwards this notice and all applicable application materials to the appropriate State agencies for review.

**North Carolina Division of Water Resources (NCDWR):** The Corps will generally not make a final permit decision until the NCDWR issues, denies, or waives the state Certification as required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice, combined with the appropriate application fee, at the NCDWR Central Office in Raleigh constitutes initial receipt of an application for a 401 Certification. Unless NCDWR is granted a time review extension, a waiver will be deemed to occur if the NCDWR fails to act on this request for certification within sixty days of receipt of a complete application. Additional information regarding the 401 Certification may be reviewed at the NCDWR Central Office, 401 and Buffer Permitting Unit, 512 North Salisbury Street, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for a 401 Certification should do so, in writing, by October 16, 2020.

NCDWR Central Office  
Attention: Mr. Paul Wojoski, 401 and Buffer Permitting Unit  
(USPS mailing address): 1617 Mail Service Center, Raleigh, NC 27699-1617

Or,

(physical address): 512 North Salisbury Street, Raleigh, North Carolina 27604

### **North Carolina Division of Coastal Management (NCDCM):**

Based upon all available information, the Corps determines that this application for a Department of Army (DA) permit does not involve an activity which would affect the coastal zone, which is defined by the Coastal Zone Management (CZM) Act (16 U.S.C. § 1453).

## **Evaluation**

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

## **Commenting Information**

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

The Corps of Engineers, Wilmington District will receive written comments pertinent to the proposed work, as outlined above, until 5pm, October 16, 2020. Comments should be submitted to Amanda Jones Fuemmeler, Asheville Regulatory Field Office, 151 Patton Avenue, Room 208, Asheville, North Carolina 28001-5006, at (828)271-7980 extension 4225 .