October 10, 2019

Mr. Mason Brandes
South Carolina Department of Health and Environmental Control-BLWM
2600 Bull Street
Columbia, South Carolina 29201

Re: Luck Stone Corporation - Chester Quarry
Chester County, South Carolina
DHEC Application I-002270
FWS Log No. 2020-I-0004

Dear Mr. Brandes:

The U.S. Fish and Wildlife Service (Service) has reviewed the information in your July 10, 2019, Public Notice of Intent to Mine for the proposed Chester Quarry located in Chester County, South Carolina. The proposed permitted acreage is 276.6, with 251.6 acres of affected area, and 25 acres of buffer. Materials to be mined at the site include metadiorite. The Service is providing comments regarding potential impacts to federally protected trust resources.

Rocky Creek and an unnamed perennial tributary flow along the northeast, central and southern portion of the site. The Rocky Creek watershed contains occupied habitat for the federally endangered Carolina heelsplitter (Lasmigona decorata). Stream surveys conducted during the 2013-2015 season identified the species in at least three tributaries to Rocky Creek. A mussel survey of Rocky Creek within the Luck Stone property was completed on March 10, 2019, by Alderman Environmental Services, Inc. (AES). They found 284 animals from three different species in six hours of search time. The Carolina heelsplitter was not found. The Service discussed these findings with AES personnel, Mr. Joseph Alderman, during an October 9, 2019, phone call. During this phone conversation, Mr. Alderman stated that while many common mussel species were found on site, habitat conditions were poor with respect to the Carolina heelsplitter. In particular, he noted that most of the reach was dominated by unconsolidated sandy substrates, beaver activity, and a very narrow forested buffer width on the west side of Rocky Creek. To the Service’s knowledge, the perennial tributary to Rocky Creek on the Luck Stone property was not surveyed, potentially due to its small size and lack of suitable mussel habitat.

Although no heelsplitter were found on the immediate project area, the Service is concerned about potential downstream impacts to the heelsplitter habitat from mine construction and
operation. Therefore, in order to adequately determine potential impacts to the Carolina heelsplitter from project activities, the Service requests an expanded mussel survey effort be completed for the project, downstream of Highway 9. This survey should cover the main stem of Rocky Creek, at least downstream to the confluence with Grassy Run Branch. Results of this survey should be submitted to this office for review and comment prior to permit issuance.

In addition, in order to help avoid impacts to potential heelsplitter and other native freshwater mussel habitat in Rocky Creek, the Service recommends the retention of a minimum 300-ft buffer between mine areas (including overburden and pit) and perennial streams. The Service acknowledges this buffer will help prevent impacts from clearing, grading, and associated mine activities. Current plans show proposed overburden stockpiles and a perimeter road located within the floodplain of Rocky Creek, both of which the Service strongly discourages.

If you need further assistance, please contact Ms. Morgan Wolf at (843) 727-4707 ext. 219 or via email at Morgan_Wolf@fws.gov, and reference FWS Log No. 2020-I-0004.

Sincerely,

[Signature]
Thomas D. McCoy
Field Supervisor

TDM/MKW
Re: [EXTERNAL] Re: Luckstone Chester site survey results

Wolf, Morgan <morgan_wolf@fws.gov>
Tue 11/19/2019 10:02 AM
To: Koon, Joe <koonjm@dhec.sc.gov>

*** Caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***

Hi Joe,

Please see my answers to your questions below:

1. Will the findings from your November 14th field visit change the Service’s request for an expanded survey in the reach of Rocky branch downstream of Highway 9 to Grassy Run Branch? The Service no longer requests an expanded survey of Rocky Creek as we covered this stretch last Thursday with sufficient rigor.

2. Do these findings change the recommendation of retaining a 300-ft buffer between mine areas and perennial streams? 300 ft buffers are recommended for streams with known or probable heelsplitter occurrences, neither of which are found on site or downstream. The Service does, however, recommend maintaining a bare minimum of 50 to 100 ft buffers along all waterways and wetlands to ensure aquatic ecosystem health. Even though no heelsplitter were found downstream of the site, this area supports numerous native freshwater mussels and should be protected from sediment erosion and siltation from project construction and operation.

3. Does the Service continue to discourage the proposed placement of overburden and a perimeter road within the flood plain of Rocky Creek? Yes, we continue to discourage this practice.

Thanks,
Morgan

On Tue, Nov 19, 2019 at 9:14 AM Koon, Joe <koonjm@dhec.sc.gov> wrote:

Morgan,

Thanks for discussing this with me this morning. As discussed, I have some followup questions regarding this information and statements from the Service’s letter dated October 10, 2019. They are as follows:

1. Will the findings from your November 14th field visit change the Service’s request for an expanded survey in the reach of Rocky branch downstream of Highway 9 to Grassy Run Branch?
2. Do these findings change the recommendation of retaining a 300-ft buffer between mine areas and perennial streams?
3. Does the Service continue to discourage the proposed placement of overburden and a perimeter road within the flood plain of Rocky Creek?

Again thank you for you time.

Joe Koon
Manager, Mining and Reclamation Section
Division of Mining & Solid Waste Management
S.C. Dept. of Health & Environmental Control
Office: (803) 898-1371
Connect: www.scdhec.gov  Facebook  Twitter

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From: Wolf, Morgan <morgan_wolf@fws.gov>
Sent: Tuesday, November 19, 2019 8:29 AM
To: Koon, Joe <koonjm@dhec.sc.gov>
Subject: [EXTERNAL] Re: Luckstone Chester site survey results

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I'll be in for the next hour or so.

On Tue, Nov 19, 2019 at 8:19 AM Koon, Joe <koonjm@dhec.sc.gov> wrote:
   Morgan,
   Thanks for this information. Are you available for a phone call to discuss sometime this morning?

Joe Koon
Manager, Mining and Reclamation Section
Division of Mining & Solid Waste Management
S.C. Dept. of Health & Environmental Control
Office: (803) 898-1371
Connect:  www.scdhec.gov  Facebook  Twitter

From: Wolf, Morgan <morgan_wolf@fws.gov>
Sent: Tuesday, November 19, 2019 7:12 AM
To: Koon, Joe <koonjm@dhec.sc.gov>
Subject: Luckstone Chester site survey results

*** Caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***
Good morning Joe,

Wanted to send you a quick note about the survey of the Luck Stone property last week as you prepare for the meeting this evening.

On Thursday, November 14th, FWS joined SCDNR and Alderman Environmental Services staff on a mussel survey of Rocky Creek from the confluence with Grassy Run upstream to about 300 meters below the Hwy 9 bridge. Mussel habitat was generally patchy throughout the survey reach, with shifting sand and beaver impoundments interspersed with better habitat in areas of embedded cobble, clay and undercut banks near tree roots. Surveyors found about 25 or so mussels in this survey reach, all of the same common species (Elliptio complanata). Although survey conditions were sub optimal (leaves had fallen on the substrate), I think that it is extremely unlikely that the heelsplitter occurs in Rocky Creek within the surveyed reach.

Please let me know if there is anything else you may need.

Best,
Morgan

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Morgan K. Wolf
US Fish and Wildlife Service, South Carolina Field Office
176 Croghan Spur Road, Suite 200
Charleston, SC 29407
Office: 843-727-4707 ext. 219

"In the end, our society will be judged not by what we create, but by what we refuse to destroy."

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.

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