COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

August 18, 2020

Mike Toelle
Holcim (US) Inc.
3500 Highway 120
Florence, CO 81226

RE: Boettcher Limestone Quarry, Permit No. M-1977-348, Technical Revision No. 11 (TR-11), Adequacy Review No. 2

Mr. Toelle:

The Division of Reclamation, Mining and Safety (Division) has identified the following additional adequacy items in your Technical Revision application (TR-11) which must be addressed before an approval of this revision can be issued:

1) Please address the adequacy items identified in the enclosed review memo from Patrick Lennberg, DRMS, dated August 18, 2020.

This completes the Division's second adequacy review. The decision date for TR-11 is currently set for **August 28, 2020**. If additional time is needed to address the adequacy items, an extension request must be received by our office prior to the decision date.

If you have any questions, you may contact me by telephone at 303-866-3567, ext. 8129, or by email at amy.eschberger@state.co.us.

Sincerely,

Amy Eschberger

Amy Eschberger
Environmental Protection Specialist

Encl: Review Memo from Patrick Lennberg, DRMS, dated August 18, 2020

Cc: Travis Bennett, Holcim (US) Inc.
Sara Harkins, Golder Associates, Inc.
Patrick Lennberg, DRMS
Michael Cunningham, DRMS

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Date: August 18, 2020

To: Amy Eschberger, DRMS

From: Patrick Lennberg, DRMS

RE: **Boettcher Limestone Quarry; M1977-348, Technical Revision No. 11 (TR-11) – Review Memo**

On August 14, 2020, I was requested to review sections of Technical Revision No. 11 (TR-11) for the Boettcher Limestone Quarry (M1977-348), specifically Sections 2.0 and 3.2. Below is a summary of my review.

Section 2.0 – Drilling and Well Installation

The follow is a list of adequacy items noted during my review of this section.

1. Please clarify if the drilling will be open hole or casing advance.

2. The Division requests that there be a detailed accounting of the quantity of water used during drilling and well development.

3. The Division encourages the Operator to collect a sample of the water used during drilling and have it analyzed for the analytical suite for the site. The sample can be used for a basis of comparison during routine sampling to help determine if formation water is being sampled or water used during drilling.

4. Why did the Operator select the screen size, 0.01-inch slot? As far as the Division is aware silting-up of the wells onsite is not a problem and larger slot size, 0.02-inch, may assist in the wells stabilizing quicker.

5. Please provide additional information on what criteria is going to be used to determine screen placement and length, e.g. 5 feet above static water level or 5 feet above the contact.

6. The Division requests that centralizers be installed during well construction to ensure that the well is centered in the borehole allowing for adequate annular space for placement of the seals and filter pack, and to prevent bowing of the well casing that may result in the casing contacting the walls of the borehole thus affecting the seals and potentially causing cross-contamination. Ensuring a straight well also will aid in effective pump installation and sampling.

7. Will water be used to tremie the filter pack to the screened interval?

Section 3.2 – Evaluation of MW-8

The follow is the adequacy item noted during my review of this section.

8. Has the Operator used the relative percent difference method to evaluate MW-4, MW-6, and MW-7 showing the comparability of the wells to one another, if so what were the results?

If you need additional information or have any questions, please let me know.

Sincerely,

Patrick Lennberg
Environmental Protection Specialist

cc: Jared Ebert, DRMS
Michael Cunningham, DRMS