

RE: Proposed Lexington Quarry Groundwater Observation Plan

Greg Mixon <MixonG@dnr.sc.gov>

Tue 6/7/2016 1:36 PM

Inbox

To: Koon, Joseph <koonjm@dhec.sc.gov>;

Cc: Joe Gellici <GelliciJ@dnr.sc.gov>;

Joe,

I do not have any additional comments beyond what Joe Gellici copied to you in the email below. If you would like our comments in the form of a letter please let me know and I can get something to you . Thanks.

Greg

Greg Mixon
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South Carolina Department of Natural Resources
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From: Joe Gellici
Sent: Tuesday, June 07, 2016 11:44 AM
To: Greg Mixon <MixonG@dnr.sc.gov>
Cc: koonjm@dhec.sc.gov
Subject: RE: Proposed Lexington Quarry Groundwater Observation Plan

Hi Greg – Here are our (Hydrology) comments regarding the groundwater observation plan for the rock quarry in Lexington County.

First, we are pleased to hear that there will be a groundwater monitoring program at the site. As I mentioned, there is concern among citizens regarding the potential impact that the quarry will have on their wells. They will be happy to hear that groundwater will be monitored.

I would suggest the following:

During the first year, expand the search area and the inventory of domestic wells from a ½-mile radius to a one-mile radius of the site. Take water-level measurements of all wells within the one-mile radius.

After the initial survey is done, make bi-annual water-level measurements (April and October) on only

those wells within ½ mile radius of pit. If, over time, water levels in one or more of these wells (wells that are within ½ mile radius) decline by 5 or more feet from the original 2016 measurement, then re-measure water levels in all of the wells that are within the one-mile radius zone to see if water levels in these wells have declined.

We've made an interesting observation in a monitoring well near a quarry in Cherokee County. It appears that blasting events can cause a sudden and significant drop in water level (20-40 ft) that can last about 2-3 days, after which the water level suddenly recovers to its original position in the well. A nearby well owner often has to go without water for several days because the water level dropped below the pump intake. Therefore, I would recommend that automated, continuous data recorders (ADRs) be installed in several of the observation wells that are being drilled around the site. ADRs should be programmed to record water levels every hour.

What if water levels do decline in the domestic wells? Is Vulcan willing to pay the costs to reset pumps or to deepen wells? I think this should be clearly stated in writing.

I plan on meeting with another group on June 16 to discuss this matter. If not too late, I will get back to you with their concerns and suggestions.

Joe Gellici
Chief Hydrologist
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gellicij@dnr.sc.gov
[SCDNR Webpage](#)
[SCDNR Hydrology Webpage](#)



From: Greg Mixon
Sent: Wednesday, June 01, 2016 9:40 AM
To: Joe Gellici <Gellicij@dnr.sc.gov>
Cc: Alex Butler <ButlerA@dnr.sc.gov>
Subject: Re: Proposed Lexington Quarry Groundwater Observation Plan

Thanks Joe.

Sent from my iPhone

On Jun 1, 2016, at 9:33 AM, Joe Gellici <Gellicij@dnr.sc.gov> wrote:

What timing. I was just talking to a citizen group several week ago about this. Let me look this over and get back to you. I meet with another group in a couple of weeks. People are concerned about their wells going dry.

Joe Gellici
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<image002.jpg>

From: Alex Butler
Sent: Wednesday, June 01, 2016 9:12 AM
To: Joe Gellici <Gellicij@dnr.sc.gov>
Subject: FW: Proposed Lexington Quarry Groundwater Observation Plan

Joe,
Do you have any comments on this?
To me the well inventory and collection of current water levels in the wells will be the most important aspect of this. Locating connecting fractures with monitoring wells is not easy to do. My only suggestion would be that they institute an annual monitoring plan of the wells in the well inventory to keep track of any changes in water levels as mining progresses.
-Alex

From: Greg Mixon
Sent: Tuesday, May 31, 2016 4:04 PM
To: Alex Butler <ButlerA@dnr.sc.gov>
Subject: FW: Proposed Lexington Quarry Groundwater Observation Plan

Alex – do you have any comments on this plan for the Vulcan Materials Quarry in Lexington? I don't have any but I wanted to check with you before I submitted anything to DHEC. Thanks.

Greg

From: Greg Mixon
Sent: Thursday, May 05, 2016 8:52 AM
To: Alex Butler <ButlerA@dnr.sc.gov>
Cc: Joe Gellici <Gellicij@dnr.sc.gov>; Lorianne Riggin <RigginL@dnr.sc.gov>
Subject: FW: Proposed Lexington Quarry Groundwater Observation Plan

Hi Alex,

Attached is a copy of the Groundwater Observation Plan for the Vulcan Materials Lexington Quarry we reviewed back in January. Let me know if you or Joe have any comments or concerns. If you have questions or need more info you can either go through me or directly to Joe Koon at DHEC. Thanks.

Greg

From: Koon, Joseph [<mailto:koonjm@dhec.sc.gov>]

Sent: Wednesday, May 04, 2016 3:04 PM

To: fishcat.curtis@gmail.com; owenrw58@yahoo.com; dscollum@yahoo.com; Greg Mixon
<MixonG@dnr.sc.gov>

Subject: Proposed Lexington Quarry Groundwater Observation Plan

Good Afternoon,

You are receiving this email as you requested to be provided the subject plan upon receipt.

The Groundwater Observation Plan has been received and is attached. It has also been added to the Public Notice Webpage.

Let me know should you have questions or want to discuss.

Thanks,

Joe Koon, Project Manager
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