From:	Mayne, Elizabeth
To:	"seaworthsafesales@hotmail.com"
Cc:	Hora, Pam; Julie Mikulas
Subject:	Response to Comments Home Office Pit, File No. M-1977-439 – AM04
Date:	Thursday, November 10, 2022 1:37:00 PM
Attachments:	image001.png
	image002.png
	image003.png
	image004.png
	image005.png
	Response Seaworth Properties.pdf

Dear Mr. Seaworth

Attached is a response to comments that you provided to the Division of Reclamation, Mining and Safety regarding

Martin Marietta's Home Office Pit application. Let me know if you have any questions.

Thank you,

Elizabeth Mayne | Project Administrator

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November 9, 2022

William Seaworth Vice President Seaworth Properties PO Box 320 Laporte, Colorado 80535

Email: seaworthsafesales@hotmail.com

RE: Seaworth Properties comments on DRMS AM-4 application – Home Office Mine, Permit M1977-439

Dear William Seaworth:

This letter is in response to the comments and concerns in your email of February 24, 2022, on behalf of Seaworth Properties on Exhibit G of Martin Marietta Materials, Inc.'s (Martin Marietta) 112c Permit Amendment (AM4) Application for the Home Office Mine submitted on December 23, 2021, File No. M-1977-439.

The reclamation plan originally called for the Stage G pits to be open water, ground fed ponds.

1. Ground water monitoring to establish existing ground water conditions and patterns was not done.

a. The Phase I, Stage G Pit was dewatered, mined, and the compacted liner installed before monitoring wells HO-12 and HO-13 were installed.

<u>Response</u>

Acknowledged, but we have incorporated Loveland Ready Mix's well data into our analyses.

b. The Phase I, Stage G Pit was dewatered for mining before monitoring well HO-1 was installed.

Response

Acknowledged, but we have incorporated Loveland Ready Mix's well data into our analyses.

- c. The absence of accurate documentation of historical ground water levels prior to mining makes
- it impossible for engineers to insure their targeted ground water levels are accurate.

Response

Historic groundwater levels are available for numerous wells, with water level measurements going back as early as 2004. Additional monitoring wells have been installed to provide additional water level monitoring data. The updated Exhibit G contains hydrographs of water wells and provides groundwater levels prior to mining and installation of the liner.

d. The absence of accurate documentation of historical ground water levels prior to mining makes it impossible for Martin Marietta's engineers to insure their mitigation drain is adequately sized or installed.

Response

Historic groundwater levels are available for numerous wells, with water level measurements going back as early as 2004. Additional monitoring wells have been installed to provide additional water level monitoring data. The updated Exhibit G contains hydrographs of water wells. Water level data were used to design the drain. Martin Marietta has delayed review and approval of this amendment so you could have a whole growing season to watch how it affected your crops. We have seen no indication that the drain is not working.

2. The Seaworth property has been historically farmed and irrigated for decades, prior to the mining of Stage G Pit.

a. The historic tailwater ditch was removed without consultation of owners with farmlands to the west and to the north.

Response

The historic tailwater ditch was located on Martin Marietta's property. A surface water swale was installed by Martin Marietta in a similar location as the historic tailwater ditch to facilitate surface drainage for the adjacent landowners to the west of Area G-I.

b. The absence of accurate documentation of historical groundwater levels and water flows through the historical tailwater ditch makes it impossible for MM's engineers to insure their mitigation drain will adequately handle the required returns from the tailwater ditch.

Response

Historic groundwater levels are available for numerous wells with water level measurements going back as early as 2004. Additional monitoring wells have been installed to provide additional water level monitoring data. The updated Exhibit G contains hydrographs of water wells. Water level data were used to design the drain.

- 3. The mitigation plan proposed by MM does not address the impacts to farming, flooding of properties, or rise in groundwater that could be caused by placement of the Stage G pit liner and/or insufficient design capacity and placement of the drain.
 - a. MM mitigation plan only addresses water rights of registered well owners.

<u>Response</u>

A surface drainage channel is proposed along the west side of Stage G-I, adjacent to the underdrain to facilitate surface drainage and maintain historic flow patterns consistent with past land use.

b. There is no mention of redesign and repair of drain if water table is impacted, or if flooding again occurs due to irrigation of Seaworth farm land.

Response

If it is determined that the underdrain is not working as intended, Martin Marietta will take appropriate steps to reduce groundwater levels to maintain the hydrologic balance consistent with past land use.

4. The amendment reads as if the liner in Phase 1 G Pit has yet to be installed, and that the drain has yet to be installed.

a. The liner has been installed, and we believe the placement of this liner, prior to installing a drain, resulted in the property flooding.

<u>Response</u>

The Stage G-I liner was installed at the completion of mining in Fall 2020. The portion of the underdrain that goes from North to South was installed in Fall 2021 to control groundwater mounding.

b. The drain has been installed, and appears to be approximately 3 feet below ground level. Because there is no historical data that provides accurate information on the historical ground water levels, there is no assurance that this drain will prove to be adequate to protect our ability to farm the land.

Response

Historic groundwater levels are available for numerous wells, with water level measurements going back as early as 2004. Additional monitoring wells have been installed to provide additional water level monitoring data. The updated Exhibit G contains hydrographs of water wells. Water level data were used to design the drain.

5. The amendment as submitted does not provide any recourse for Seaworth Properties to obtain relief should the drain that is installed prove not to work.

a. We would like to see provisions that require MM to replace, relocate, resize, the drain if any flooding occurs during irrigation season, if the ground water level reaches a level less than 3' beneath the surface.

<u>Response</u>

If it is determined that the underdrain is not working as intended, Martin Marietta will take appropriate steps to reduce groundwater levels consistent with past land use. Martin Marietta has delayed review and approval of this amendment so you could have a whole growing season to watch how it affected your crops. We have seen no indication that the drain is not working.

b. We would like to see provisions that require MM to replace lost crops due to flooding caused by inability of drain to carry tailwater from any irrigation of lands to the west and the north of the Stage G pits.

<u>Response</u>

If it is determined that the crop loss is caused by Martin Marietta, Martin Marietta agrees to pay market value crop rates for the crop loss. Martin Marietta has delayed review and approval of this amendment so you could have a whole growing season to watch how it affected your crops. We have seen no indication that the drain is not working.

c. We would like to see provisions that require MM provide proof to DRMS that the drain design is working properly and that groundwater levels on Seaworth property have not been impacted prior to release of the Reclamation Bond.

<u>Response</u>

Groundwater monitoring will continue through mining and reclamation to assess the functionality of the underdrain. In the event that the lined water storage reservoir is sold to another party, the maintenance of the drain will convey will the sale of the reservoir. Martin Marietta has delayed review and approval of this amendment so you could have a whole growing season to watch how it affected your crops. We have seen no indication that the drain is not working.

Thank you for your consideration. If you have any questions or need additional information, please let me know.

Sincerely,

TETRA TECH

Jon 9 term

Tom Hesemann, PG, CEG Senior Engineering Geologist/Hydrologist