



August 2, 2024

Mr. Joel Renfro
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

**RE: Thunderbird Sand and Gravel, M-2023-032
Response to Adequacy Review No. 3**

Dear Mr. Renfro:

Martin Marietta Materials, Inc. received a copy of the Division of Reclamation, Mining and Safety's ("DRMS") Adequacy Review No. 3 for the above captioned permit, dated July 22, 2024. Please see the following responses, and the referenced supporting documentation.

Rule 6.4 Specific Exhibit Requirements – 112c Reclamation Operation

- *Please review and respond to the adequacy items provided by Rob Zuber, DRMS (see enclosed letter, dated July 15, 2024)*

Item #17

- *There appears to be a contradiction in the response for this item and item #41. In item #17, the applicant states that the analysis using the HEC-RAS model may be performed. However, in item #41 the applicant states that the analysis will be performed. The applicant needs to clarify this apparent contradiction.*

Response: The applicant expects that an analysis such as the HEC-RAS model may be required by the Pueblo County Floodplain permit. If such analysis is completed for the floodplain permit, it will be provided to DRMS. In the meantime, no mining will occur within 400 feet to the river bank unless a Technical Revision is submitted that either provides detailed designs of inlet/outlet structures, or a hydrologic analysis demonstrating stability of the pit banks during a 100-year flood event.

- *The applicant states that, "backfill is the flood control structure". This is inconsistent with the position of the Division. The applicant must commit to one of the following:*
 - *Mine at least 400 feet from the river throughout the life of the mine*
 - *Provide detailed designs of the inlet/outlet structures for the reservoirs*
 - *Conduct a detailed hydrologic analysis to illustrate that the proposed pit banks, during mining and after reclamation, will not be significantly eroded by a 100-year flood event.*

Response: The applicant will not mine within 400 feet of the river bank until a Technical Revision is submitted that either provides detailed designs of inlet/outlet structures, or a hydrologic analysis demonstrating stability of the pit banks during a 100-year flood event.

West Division

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- *If the applicant chooses the option of detailed designs of inlet/outlet structures for the reservoirs, the design must be based on guidelines from a recognized authority (e.g., a county drainage manual) and/or detailed hydrology and hydraulics analyses.*

Response: Acknowledged.

Item #41

- *The applicant needs to commit to submitting a TR to the Division that includes the HEC-RAS analysis (or similar) prior to mining within 400 feet of the river.*

Response: Applicant commits to submitting a Technical Revision that either provides detailed designs of inlet/outlet structures, or a hydrologic analysis demonstrating stability of the pit banks during a 100-year flood event prior to mining within 400 feet of the river.

- *Please update all Exhibits and maps that might be changed based on Martin Marietta's response to Rob Zuber's letter. These Exhibits may include, but are not limited to Exhibit C, D, E, F and L. Please note that the mining plan and reclamation plans can be updated in the future to reflect mining closer to the river in the same Technical Revision submitted with the HEC-RAS analysis.*

Response: Please find attached revised Exhibits C, D, E, F and L.

If you have questions, please contact me at 720-612-6232 or by e-mail at phillip.courtney@martinmarietta.com.

Sincerely,



Phillip J. Courtney
Land Manager

Encl(s):