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

March 13, 2025

Greg Geras
Asphalt Specialties Company, Inc.
345 W. 62nd Ave.
Denver, CO 80216

Re: Evans Mining Resource, Permit No. M-2024-056, 112c Construction Materials Application, Adequacy Review #4

Dear Mr. Geras:

The Division of Reclamation, Mining and Safety (Division) engineering staff reviewed the content of the applicant's Adequacy Review #2 Responses submitted by Lewicki and Associates on March 3, 2025, and submits the following additional comments.

1. In the context of Rule 3.1.6 and our Floodplain Standards, a detailed analysis of the inflow/outflow structure is required. This requirement is described in the Division's Floodplain Protection Standards for Sand and Gravel Pits Adjacent to Rivers and Perennial Streams. The operator has included a detailed design drawing (F-2 Flow Structures), but additional information is needed. Is the design based on a standard methodology from a drainage criteria manual or other source? This must be discussed in Exhibit G. Also, Exhibit G requires a description of how the velocity on the F-2 figure (7.09 feet/second) was determined.

    a. The Applicant needs to provide more information on the HEC-RAS model. It appears that this was a 1D model. Explain why a 1D model, rather than a 2D model, is sufficient to estimate flow velocity through the proposed structure.

    b. The text on page G-3 discusses the design velocity of 7 feet/second and mentions previous designs that use this value for velocity. The Applicant should provide detailed references for example designs and/or studies that are applicable to this reach of the river. In particular, it would be useful to provide a reference to a related report from the Colorado Water Conservation Board. As an alternative to referencing other designs and reports, the Applicant can provide a detailed report that presents the inputs and assumptions to their HEC-RAS analysis, including cross-sections, the design flow for the 100-year storm, and other important inputs to the model.

    c. On the Flow Structures figure (Exhibit F-2), within the detail for the Pit Side Concrete Cutoff Wall, the label for pitside armoring states that "D50 = 48". The Applicant should indicate if this is correct. If it is correct, why are boulder-sized rocks proposed for this structure, rather than 6-inch riprap, as indicated in the notes of this figure?

2. Additional information is required to explain the inputs to the Hydrology Calculations in Appendix G-1. In particular, how were runoff coefficients determined? Revise Exhibit G to include this information.

   - *No additional response required.*

3. The applicant should explain the difference between the volumes in Table G-3 on page G-4 (fifth column from the left) and the volumes in the Hydrograph Summary Report in Appendix G-1 (sixth column from the left). These values are different. Please explain what each represents and why they are different. Revisions should be made to Exhibit G, as appropriate.

   - *No additional response required.*

The decision date for this application is **April 30, 2025**. Please allow the Division sufficient time to perform another review of your responses prior to this date. If you are unable to provide satisfactory responses to any inadequacies, it will be your responsibility to request an extension of time to allow for continued review of this application.

If you have any questions, please contact me by telephone at (720)527-1640 or by email at nikie.gagnon@state.co.us.

Sincerely,

Nikie Gagnon

Nikie Gagnon
Environmental Protection Specialist

Ec: Ben Miller, Lewicki & Associates
Sydney Connor, Lewicki & Associates
Jared Ebert, Senior EPS, DRMS