

Gagnon - DNR, Nikie <nikie.gagnon@state.co.us>

## M1999-120 Ft. Lupton AM3 2nd Adequacy Letter - Floodplain Review

1 message

Gagnon - DNR, Nikie <nikie.gagnon@state.co.us> Fri, Feb 7, 2025 at 3:58 PM To: Lynn Mayer Shults <lmshults@lgeverist.com>, "Environment, Inc." <environment-inc@startmail.com>

Hello.

Please see the attached 2nd adequacy letter for the Fort Lupton Sand and Gravel Mine Amendment 3. The Division's engineering staff reviewed the bank armoring plans and submitted the attached additional questions.

Let me know if you have any questions on this one or the first set of questions.

Kind regards,

Nikie Gagnon Environmental Protection Specialist



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

Cell: 720.527.1640 Physical: 1313 Sherman Street, Room 215, Denver, CO 80203 Address for FedEx, UPS, or hand delivery: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216 nikie.gagnon@state.co.us | https://www.drms.colorado.gov

M1999120\_AM3\_Adequacy Letter 2\_20250207.pdf 239K



February 7, 2025

Lynn Shults L.G. Everist, Inc 7321 E. 88<sup>th</sup> Ave. Suite 200 Henderson, CO 80640

Re: Fort Lupton Sand and Gravel Mine, Permit No. M-1999-120; L.G. Everist, Incorporated, Amendment 03 2nd Adequacy Review

Dear Ms. Shults:

The Division of Reclamation, Mining and Safety (Division/DRMS) continues to review the Amendment Application package submitted for the above referenced permit. A preliminary adequacy letter was sent to the applicant on February 5, 2025. The Division's engineering staff reviewed the AM-03 application in the context of Rule 3.1.6 and our Floodplain Standards. Based on this review, the Division has the following additional questions.

- The Division requires that the "Floodplain Protection Standards for Sand and Gravel Pits Adjacent to Rivers and Perennial Streams" (February 2024) (Floodplain Standards) be applied to the South Area as well as the Northeast Area. This will limit damage to property and infrastructure in this area during flood events and reduce the possibility of "stream capture" of the South Platte River. The exhibits, both text and maps, need to be revised to reflect this additional protection. Any existing armoring of riverbanks may be accounted for in the application of the Floodplain Standards.
- 2. The text within the Bank Armoring Plan (page 111) states, "The two phases that have mining within 400 feet of the South Platte River are Northeast #1 and Northeast #3." Please explain why this text excludes other areas of the mine that are within 400 feet of the river. Revise the text as appropriate.
- The text within the Bank Armoring Plan (page 111) states that there is a setback of 275 feet from the riverbank to the limits of mining. However, as discussed in the Division's Floodplain Standards (page 3), if only pitside armoring is used, the setback from the riverbank must be 300 feet or more. The exhibits, both text and maps, need to be revised to reflect this change.
- 4. The text within Reservoir Bank Armoring Methods and Materials (page 111) states that the armored face is 35 feet wide and that 2.35 cyd/1ft of material will be required. The text should include some discussion regarding the calculation of these values.
- 5. The Bank Armoring Plan should include a discussion of the methodology used for the design, including references. References might include a professional article, a textbook, and/or a drainage criteria manual (from, for example, Weld County or CDOT).



- 6. The design drawing for the Bank Armoring Plan (Figure 1) does not include a geotextile material or granular filter under the armoring material. Please explain why this standard practice is excluded from the design.
- 7. More detail is needed to explain the calculations on page 114.
  - a. How was the hydraulic radius (R value) determined, and is it associated with a return event, such as the 100-year event?
  - b. What is the source for the S s value of 2.4?
  - c. What is the source for the value of 35 degrees for the angle of repose?
  - d. The S value is defined as "face slope of pitside bank." Is that terminology accurate?
- 8. On Map C-1, Plan B has no illustration of armoring. Please revise this map or explain why that illustration is excluded.

This concludes the Division's 2nd adequacy review of this application. The Division continues to review the application and may send additional adequacy review letters. Please note that the decision date for this application is **April 11, 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

*Enclosure:* 2024 Floodplain Protection Standards for Sand and Gravel Pits Adjacent to Rivers and Perennial Streams

Ec: Stevan O'Brian, Environment Inc Jared Ebert, DRMS