Mineralys Therapeutics, Inc. 150 N. Radnor Chester Road Suite F200 Radnor, Pennsylvania 19087

April 9, 2024

VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Re: Mineralys Therapeutics, Inc. Registration Statement on Form S-3, as amended File No. 333-278122

Ladies and Gentlemen:

Pursuant to Rule 461 of Regulation C of the General Rules and Regulations under the Securities Act of 1933, as amended, the undersigned, on behalf of Mineralys Therapeutics, Inc., respectfully requests that the effective date of the Registration Statement on Form S-3 referred to above be accelerated so that it will become effective at 4:00 P.M. Eastern Time on April 11, 2024, or as soon as practicable thereafter.

If you have any questions or require additional information, please contact Jonathan R. Zimmerman of Faegre Drinker Biddle & Reath LLP at (612) 766-8419. Thank you for your assistance and cooperation in this matter.

Very truly yours,

MINERALYS THERAPEUTICS, INC.

By: /s/ Adam Levy

Adam Levy Chief Financial Officer

cc: Jon Congleton, Chief Executive Officer, Mineralys Therapeutics, Inc.
Jonathan R. Zimmerman, Faegre Drinker Biddle & Reath LLP
Griffin D. Foster, Faegre Drinker Biddle & Reath LLP
Ilir Mujalovic, Shearman & Sterling LLP