

January 5, 2023

VIA EDGAR

United States Securities and Exchange Commission
Division of Corporation Finance
Office of Industrial Applications and Services
100 F Street NE
Washington, D.C. 20549
Attn: Dillon Hagius and Laura Crotty

White & Case LLP
1221 Avenue of the Americas
New York, NY 10020-1095
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**Re: AMCI Acquisition Corp. II
Amendment No. 5 to Registration Statement on Form S-4
Filed January 3, 2023
File No. 333-264811**

Dear Mr. Hagius and Ms. Crotty:

On behalf of our client, AMCI Acquisition Corp. II, a Delaware corporation (the “Company” or “AMCI”), and as discussed on the conference call between Mr. Hagius, White & Case LLP, counsel to AMCI, and Covington & Burling LLP, counsel to LanzaTech NZ, Inc., a Delaware corporation, that occurred on the morning of January 5, 2023, we are writing to submit the Company’s proposed response to the comment of the staff of the Division of Corporation Finance (the “Staff”) of the United States Securities and Exchange Commission (the “Commission”) contained in the Staff’s letter dated January 4, 2023 (the “Comment Letter”), with respect to the above-referenced Registration Statement on Form S-4, filed on January 3, 2023 (the “Registration Statement”). For ease of reference, the comment contained in the Comment Letter is printed below in bold and is followed by the Company’s proposed response.

Amendment No. 5 to Registration Statement on Form S-4

U.S. Federal Income Tax Considerations, page 297

- 1. Please revise your disclosure in this section to: (1) clearly state that the tax disclosure in this section is the opinion of White & Case LLP and/or Covington & Burling LLP, and; (2) clearly identify and articulate the opinions being rendered. Refer to sections III.B.2 and III.C.1 of CF Staff Legal Bulletin No. 19.**

Response: The Company acknowledges the Staff’s comment and attaches hereto as Annex A the revisions the Company proposes to make to the Registration Statement in response to the Staff’s comment.

* * *

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Please do not hesitate to contact Elliott Smith of White & Case LLP at (212) 819-7644 with any questions or comments regarding this letter.

Sincerely,

/s/ White & Case LLP

White & Case LLP

cc: Nimesh Patel, AMCI Acquisition Corp. II