UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

August 4, 2022

Lorin Crenshaw
Chief Financial Officer
Compass Minerals International, Inc.
9900 West 109th Street, Suite 100
Overland Park, KS 66210

Re: Compass Minerals International, Inc.
Form 10-KT for the transition period from January 1, 2021 to September 30, 2021
Filed November 30, 2021
Response letter filed July 15, 2022
File No. 001-31921

Dear Mr. Crenshaw:

We have reviewed your July 15, 2022 response to our comment letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our June 15, 2022 letter.

Form 10-KT for the transition period from January 1, 2021 to September 30, 2021

Summary Overview of Mining Operations, page 31

1. We have read your response to comment 1 stating you believe your disclosure is compliant and is consistent with your historical non-disclosure of individual property production. Section 1300 of Regulation S-K became effective January 1, 2021 and replaced the previous mining regulations. Summary production disclosure for your properties is a requirement and as such, cannot be waived for reasons of confidentiality. Please revise your filing to report each individual property's production by product such as salt, sulfate of potassium, magnesium chloride, etc.

Summary of Mineral Resources and Reserves, page 33

2. We understand from your response to prior comment 2 that you would prefer to address your reserve disclosure deficiencies in future filings. We note you did not provide a cutoff grade or lithium prices for your lithium resources which fails to demonstrate economic potential. Please include your assumed lithium price and cutoff grade for your lithium resource estimate or remove your lithium resources from your filing. In addition, we believe you should file an amendment to the Form 10-K, which would include your revised exhibits of your amended technical report summaries.

Ogden facility, page 39

3. We note your response to comment 3 that a discussion of your salt and magnesium chloride resources/reserves is not required as they are co-products of the SOP production and that salt and magnesium chloride resources/reserves are not material to the company from a cash flow perspective on a consolidated basis. Salt and magnesium chloride are co-products of your SOP operations, with intermingled costs and revenues affecting all discussions of your resources/reserves and operations. The omission of the salt and magnesium chloride production, revenues, and costs present a partial and incomplete assessment of your Ogden operations in both your filing and technical reports. Please revise your filing and technical reports to include a discussion of your salt and magnesium chloride production, revenues, costs, cash flows and resources/reserves.

Item 8. Financial Statements and Supplementary Data
Notes to Consolidated Financial Statements, page 84

4. We have read your response to comment 5. Please amend your transition report on Form 10-KT to provide the required disclosures pursuant to Item 302(a) of Regulation S-K.

Item 9A. Controls and Procedures , page 120

5. We have read your response to comment 7 and note that you identified a new inventory accounting error in the quarter ended September 30, 2021 regarding distribution cost variances. Provide us with your materiality assessment that explains why this error is considered immaterial to the current quarter or any prior quarterly or annual financial statement periods.

Exhibits General, page E-1

6. We understand from your response to comment 9, that you would prefer to address the deficiencies in your Technical Report Summaries in future filings, such as your next annual report on Form 10-K. However, we believe that you should obtain and file an amendment to the Form 10-K and include your revised exhibits with the amended filing. Please modify your exhibits and file them with an amended Form 10-K.

Exhibit 96.1 Ogden, page E-3

7. We note your response to comment 10 indicating you did not believe your technical report summary and cash flow analysis requires disclosure of your co-products salt or magnesium chloride. As your technical report only addresses sulfate of potassium, the resources and reserves for salt or magnesium chloride are not established. Please modify your filing and remove all salt or magnesium chloride resources and reserves related to the Ogden facility from your filing.

Exhibit 96.2 Ogden Lithium, page E-4

8. We note your response to comment 11 in which you assert there are reasonable prospects for economic extraction of lithium given your property's similarity to other extraction operations and will include additional disclosure in your future filings. Your qualified person is still required to demonstrate economic potential either using a breakeven cutoff grade calculation stating the lithium price/specifications, processing costs, and other associated costs or provide a more comprehensive cash flow analysis. Without either of these cost analysis's, an opinion or assertion of economic potential has no merit. Please revise your technical report to provide a cutoff grade calculation and/or cash flow analysis to demonstrate your economic assessment is possible.

You may contact Robert Babula, Senior Staff Accountant at (202) 551-3339, or Gus Rodriguez, Branch Chief at (202) 551-3752 if you have questions regarding comments on the financial statements and related matters. Please contact Ken Schuler, Mine Engineer at (202) 551-3718 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Energy & Transportation