



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

DIVISION OF
CORPORATION FINANCE

July 6, 2010

Rodney L. Underdown
Vice President and Chief Financial Officer
Compass Minerals International, Inc.
9900 West 109th Street, Suite 600
Overland Park, KS 66210

Re: Compass Minerals International, Inc.
Form 10-K for Fiscal Year Ended December 31, 2009
Filed February 22, 2010
File No. 1-31921

Dear Mr. Underdown:

We have reviewed your filing 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 this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2009

Controls and Procedures, page 65

Disclosure Controls and Procedures, page 65

1. We note your statement on page 65 that "management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures." In future filings, please state clearly, if true, that your disclosure controls and procedures are

designed to provide reasonable assurance of achieving their objectives and that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at that reasonable assurance level. In the alternative, you may remove the reference to the level of assurance of your disclosure controls and procedures. Please refer to SEC Release No. 34-47986, available on our website at <http://www.sec.gov/rules/final/33-8238.htm>. Please confirm that the conclusion disclosed in this filing would not have changed had this revised disclosure been provided.

2. We note that you provide the full definition from Exchange Act Rule 13a-15(e) when you describe your disclosure controls and procedures (in the first paragraph of this section), but you state management's conclusion as to the effectiveness of your disclosure controls and procedures as of December 31, 2009 only in terms of the first half of the definition. In future filings, please state management's conclusion either in terms of the full definition or without elaborating the definition at all. Please confirm that the conclusion disclosed in this filing would not have changed had this revised disclosure been provided.

Exhibit 10.4

3. It appears that you have not filed this exhibit in its entirety. With your next periodic report, please re-file your Amended and Restated Credit Agreement as a complete exhibit, including all of the schedules and exhibits thereto. We note that while Item 601(b)(2) of Regulation S-K permits you to omit schedules (or similar attachments) if they do not contain information which is material to an investment decision or which is already disclosed in the agreement or disclosure document, there is not a similar provision in Item 601(b)(10) of Regulation S-K.

Definitive Proxy Statement on Schedule 14A

Compensation Discussion & Analysis, page 34

4. With respect to the comments on your executive compensation disclosure, please show us how you intend to comply with our comments in the future by providing us with draft disclosure based on information and data from 2009.

Base Salary, page 37

5. We note your disclosure that the compensation committee increased base salaries in March 2009. Please enhance your disclosure by stating the current base salaries and the amounts by which they were increased from the prior year. Expand to discuss how your salary levels compared with the peer company levels.

Annual Incentive Plan, page 38

6. We note your disclosure on pages 40-41 concerning the safety improvement multiplier used in the Annual Incentive Plan to encourage and reward safe operations. Please expand your disclosure to describe the safety goals that you measure.

Engineering Comments

Operations and Facilities, page 6

7. We note your reference to third party reserve studies and other discussions regarding your reserves. Please forward to our engineer as supplemental information and not as part of your filing, your information that establishes the legal, technical, and economic feasibility of your materials designated as reserves, as required by Section C of Industry Guide 7 and pursuant to Rule 12b-4 of the Exchange Act. The information requested includes, but is not limited to:
 - Property and geologic maps
 - Description of your sampling and assaying procedures
 - Drill-hole maps showing drill intercepts
 - Representative geologic cross-sections and drill logs
 - Description and examples of your cut-off calculation procedures
 - Cutoff grades used for each category of your reserves and resources
 - Justifications for the drill hole spacing used to classify and segregate proven and probable reserves
 - A detailed description of your procedures for estimating reserves
 - Copies of any pertinent engineering or geological reports, and executive summaries of feasibility studies or mine plans which including the cash flow analyses
 - A detailed permitting and government approval schedule for the project, particularly identifying the primary environmental or construction approval(s) and your current location on that schedule.

To minimize the transfer of paper, please provide the requested information on a CD, formatted as Adobe PDF files and provide the name and phone number for a

technical person our engineer may call, if he has technical questions about your reserves.

In the event your company desires the return of this supplemental material, please make a written request with the letter of transmittal and include a pre-paid, pre-addressed shipping label to facilitate the return of the supplemental information. Please note that you may request the return of this information pursuant to the provisions of Rule 418(b).

If there are any questions concerning the above request, please phone George K. Schuler, Mining Engineer, at (202) 551-3718.

8. Please disclose in a table of your proven and/or probable reserves, listing the estimated tonnage (quantity) and grade (quality). Please clarify that your reserves are either in-place or recoverable/salable reserves and include a statement your reserve estimates incorporate losses for mine dilution and/or mining recovery.
9. Please disclose your annual production for each mine as required by Regulation S-K, Instructions to Item 102, Part 3.

Environmental, Health and Safety Matters, page 12

10. In this section, and your statement of risk factors, we note you disclose your company complies with certain safety and occupational health standards at your operations and that you have developed operational safety procedures for your employees. In an appropriate section of your 10-K filing, please include a discussion of your safety performance referencing capital expenditures, safety programs, and statistical measures such as those reported to the MSHA or any other measures that your organization utilizes to monitor performance.

In addition to the above information, please provide to us your occupational injury frequency rates, such as a lost-time injury frequency rate and/or fatal injury frequency rates (MSHA), etc. that your company reports and compare your performance to comparable national statistics for the last three years.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

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- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact George K. Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments. Please contact Alexandra M. Ledbetter, Staff Attorney, at (202) 551-3317 or me at (202) 551-3611 with any other questions.

Sincerely,

Anne Nguyen Parker
Branch Chief