



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4628

March 11, 2010

Via U.S. Mail & Facsimile

Ms. Caitlin Jeffs
Chief Executive Officer
Red Metal Resources Ltd.
195 Park Avenue
Thunder Bay, Ontario
Canada P7B 1B9

**Re: Red Metal Resources Ltd.
Form 10-12G
File No. 0-52055
Filed February 12, 2010**

Dear Ms. Jeffs:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your registration statement in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you might have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Provide complete responses, and where disclosure has changed, indicate precisely where in the marked version of the amendment you file we will find your responsive changes. To the extent comments on one section apply to similar disclosure elsewhere, please make corresponding revisions to all affected areas. Further, please provide updated disclosure with each amendment. This will minimize the need for us to repeat similar comments.
2. Given your recent filing of a Form 15, please tell us why you have filed this Form 10 at this time.

3. We note that this Form 10 will become effective by operation of law on April 13, 2010. If you choose to withdraw this registration statement prior to its becoming automatically effective, please contact us prior to the end of the sixty day period.

Business, page 1

4. We note your statements here and at page 25 regarding uncertainty surrounding title to your mineral claims. You conclude that, to the best of your knowledge, you hold valid title to all of your claims. Please revise to disclose what steps you have taken to determine whether you hold valid title, and add appropriate risk factor disclosure of the risks posed by this uncertainty.
5. In addition, we note that some of your claims are “staked over other owners’ claims,” and your rights in such claims will not attach unless the rightful owners fail to pay their taxes. Please clarify exactly which interests this statement applies to and add risk factor disclosure as appropriate.

Farellon Property, page 2

6. We note that Minera Farellon Limitada, a company with whom you have a “close working relationship” and from whom you have acquired several of your mineral claims, is controlled by one of your affiliates and the father of your Chief Executive Officer. Please disclose this fact prominently the first time you refer to Farellon.

Camila Breccia Claims, page 9

7. Please disclose the price paid to Minera Farellon to acquire the option to buy the Camila claims. Likewise, on the following page, revise to disclose the purchase price of the option to acquire Minera Farrelon’s option to buy the Santa Rosa claims.

Government Controls and Regulations, page 11

8. We note that some of your claims are within the boundaries of a national park and that you will need written authorization from the government to conduct any exploration work or mine. Please discuss the feasibility and likelihood of attaining such written authorization, and provide risk factor disclosure as appropriate.

Management’s Discussion and Analysis, page 16

9. With respect to the proposed two-phase drilling program at your Farellon property, please revise to disclose your current cash position and the amount of capital you will need to raise to commence exploration activities.

Challenges and Risks, page 24

10. You state that you have raised \$2,307,000 since January 31, 2007. However, this figure appears to contradict your other disclosures. For example, under the "Equity Financing" caption, you state that you raised \$2,715,018 through sales of common stock and warrants in the period since inception. Please revise for consistency.

Related-Party Transactions, page 25

11. We note that this section contains disclosure that is duplicative of disclosure at page 31 under the caption titled, "Transactions with Related Persons." Please combine these two related sections. In addition, revise your disclosure to include all of the information required by Item 404(d) of Regulation S-K. For example and without limitation, disclose the identities of the related parties in each case and the related person's interest in the transaction. In addition, you must provide this disclosure for the prior three preceding fiscal years. See Instruction 1 to Item 404.

Directors and Executive Officers, page 29

12. Please revise to include all of the disclosure required by Item 401 of Regulation S-K. In this regard we note that Item 401 was materially revised by Release No. 33-9089, which took effect February 28, 2010. Please review the new requirements and revise your registration statement accordingly. For example, for each director, briefly discuss the specific experience, qualifications, attributes, or skills that led to the conclusion that the person should serve as a director.

John Da Costa, page 30

13. Provide a brief description of the principal business of GlobeTrac Inc.

Certain Relationships and Related Transactions, and Director Independence, page 31

Director Independence, page 31

14. Provide adequate risk factor disclosure of the risks posed by the fact that none of your directors is independent.

Transactions with Related Persons, page 31

15. You state that "[N]o director, executive officer, or [5% holder] . . . had any direct or indirect material interest in any transaction . . . except for the following." Please revise to state affirmatively that there *were* such transactions during the relevant time period.

Financial Statements

16. Given that you do not meet the requirements enumerated in Rule 8-08(b) of Regulation S-X, you will need to update your registration statement to include financial statements for the fiscal year ended January 31, 2010 after March 17, 2010 and prior to the effective date of April 13, 2010.

Engineering Comments

General

17. We note that your website and some press releases refer to or use the terms “measured,” “indicated,” and “inferred,” resources. If you continue to make references on your web site or press releases to reserve measures other than those recognized by the SEC, please accompany such disclosure with the following cautionary language:

Cautionary Note to Investors -The United States Securities and Exchange Commission permits U.S. mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce. We use certain terms on this website (or press release), such as “measured,” “indicated,” and “inferred” resources, which the SEC guidelines generally prohibit U.S. companies from including in their filings with the SEC. Investors are urged to consider closely the disclosure in our Form 10-K which may be secured from us, or from our website at <http://www.sec.gov/edgar.shtml>.

Please indicate the location of this disclaimer in your response.

18. Many of our comments apply to disclosure that appears in more than one place. To eliminate the need for us to issue repetitive comments, please make corresponding changes to similar disclosures throughout your document.

Principal Properties, page 3

19. We note you disclose your assay results with values up to certain levels. When reporting the results of sampling and chemical analyses, please adhere to the following points regarding mineralization of existing or potential economic significance:
- Disclose only weighed-average sample analyses associated with a measured length or a substantial volume.
 - Eliminate all analyses from “grab” or “dump” samples, unless the sample is of a substantial and disclosed weight.

- Replace all disclosure of the highest or best values/grades of sample sets with balanced disclosure of the drill and sampling results.
- Eliminate grades disclosed as “up to” or “as high as” or “ranging from.”
- Eliminate statements containing grade and/or sample-width ranges.
- Aggregated sample values from related locations should be aggregated based on a weighted average of lengths of the samples.
- Use tables where practicable to improve readability of sample and drilling data.
- Soil samples may be disclosed as a weighted average value over an area.
- Refrain from reporting single soil sample values.
- Convert all ppb quantities to ppm quantities for disclosure.
- Avoid optimistic descriptive adjectives such as high-grade or ore-grade.

Please revise your disclosures to comply with this guidance.

20. Detailed sampling provides the basis for the quality estimate or grade of your mineral discovery. Please provide a brief description of your sample collection, sample preparation, and analytical procedures used to develop your analytical results. In addition, please disclose any Quality Assurance/Quality Control (QA/QC) protocols you have developed for your exploration program. These procedures would serve to inform potential investors regarding your sample collection and preparation, assay controls, sample custody, assay precision and accuracy procedures and protocols.

Exploration history, page 4

21. We note you have disclosure in this section referring to mines and other mineral properties that may be near your properties, which may cause investors to infer that your properties also have commercial mineralization because of their proximity to these mines and other properties. Please remove such disclosure and instead describe only geology, history, and exploration programs and results that are directly related to the properties that you have the right to explore or mine. Any information about mines, prospects, adjacent or analogous properties, deposits, occurrences, or exploration activities by other companies operating in the vicinity of your properties should be replaced with disclosure that is focused solely on your property interests and exploration programs.

Location and Means of Access to the Farellón Property, Page 5

22. Please insert a small-scale map showing the location and access to each material property, as required by Instruction 3.B to Item 102 of Regulation S-K. If you have property interests that are not material, identify these and include a statement to that effect. We believe the guidance in Instruction 3.B to Item 102 of Regulation S-K would generally require maps and drawings with the following features:

- A legend or explanation showing, by means of pattern or symbol, every pattern or symbol used on the map or drawing.
- A graphical bar scale; additional representations of scale such as "one inch equals one mile" may be utilized provided the original scale of the map has not been altered.
- A north arrow.
- An index map showing where the property is situated in relationship to the state, province, or other geographic area in which it is located.
- A title of the map or drawing, and the date on which it was drawn.
- In the event interpretive data is submitted in conjunction with any map, the identity of the geologist or engineer that prepared such data.

Any drawing should be simple enough or of sufficiently large scale to clearly show all features on the drawing.

Exploration History of the Mateo Group, Page 9

23. We expect you will need to remove all resource disclosure from your filing, including the information about inferred resources in this section, to comply with Instruction 3 to paragraph (b)(5) of Industry Guide 7, which generally precludes disclosing estimates of mineralization other than proven and probable reserves.

Government Controls and Regulations, page 11

24. Please provide a short summary of the permits and/or operational plans required to perform exploration activities on your properties.

Exhibit 99

25. Please remove the technical report that you attached as an exhibit to your filing to adhere to the guidance in paragraph (b)(7) of Industry Guide 7, which prohibits technical studies from being attached to or included in the filing.

Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Ms. Caitlin Jeffs
Red Metal Resources Ltd.
March 11, 2010
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You may contact Paul Monsour at (202) 551-3360 or Karl Hiller, Branch Chief, at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters. You may contact Ken Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments. Please contact John Lucas at (202) 551-5798 or, in his absence, me at (202) 551-3745 with any other questions.

Sincerely,

Anne Nguyen Parker
Branch Chief