



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

DIVISION OF CORPORATION FINANCE
MAIL STOP 7010

April 18, 2007

via U.S. mail

Mr. Gary Freeman
Chief Executive Officer
Pediment Exploration Ltd.
905 West Pender Street, #300
Vancouver, British Columbia, Canada V6C 1L6

**Re: Pediment Exploration Ltd.
Registration Statement on Form 20-F
Filed March 20, 2007
File No. 0-52509**

Dear Mr. Freeman:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. 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 may 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.

Registration Statement on Form 20-F

General

1. Please note that the Form 20-F registration statement will become automatically effective 60 days from the date of the first filing with Edgar. See Section 12(g)(1) of the Securities Exchange Act of 1934. Upon effectiveness, you will become subject to the reporting requirements of the Securities Exchange Act of 1934, regardless of the status of the review of this filing.

2. Where comments on one section also relate to disclosure in another section, please make parallel changes to all affected disclosure. This will eliminate the need for us to repeat similar comments.
3. Update your disclosure throughout your filing to the most recent practicable date with each amendment. For example, update the exchange rate information on page 15. See Item 3.A.3 of Form 20-F.

Introduction, page 3

4. In this section, please briefly describe the nature of the interests you have in each of your projects in Mexico, which appear to be exploration and exploitation concessions, and disclose your obligations and rights with respect to these interests. For example, disclose that surface rights are owned by private persons or the local village. Please also disclose that your exploration licenses in Mexico have commitments for exploration expenditures in the 2007 calendar year of about \$700,000.
5. Please also disclose in this section that, in connection with the purchase of Pitalla, you are contingently obligated to issue a further 2,500,000 common shares upon the achievement of certain performance standards related to the property interests.
6. Finally, please disclose the number of full-time employees you have currently.

Glossary, page 4

7. A glossary does not substitute for presenting disclosure in terms that those unfamiliar with your business can readily understand. Revise the disclosure in the document, particularly in the discussion of your properties, to provide clear and understandable disclosure. The following three are typical of the several instances of overly technical disclosure, which should be revised to provide clearer disclosure:
 - “The Texson Ridge silver target is a 200-400 meter-wide by one-kilometer-long area exposing limonite-jarosite-sericite alteration of Precambrian aged granite and gneiss, below a silica cap in the hanging wall of the thrust plate that forms the crest of the ridge.”
 - “The Valenzuela project contains a highly weathered series of northeasterly to easterly trending, and of northerly trending, epithermal quartz veins cutting Tertiary aged Lower Volcanic Unit andesite and dacite units within a window in post mineral Upper Volcanic units.”
 - “A moderate to strong anomaly would be expected for porphyry copper sulfide mineralization and its surrounding pyritic halo.”

Revise as necessary to define technical terms in context and to explain any industry terms or concepts in necessary detail. The reader who has no prior mining experience or geological expertise should be able to understand your disclosure. We may have additional comments.

Selected Financial Data page 13

8. Please replace references to Canadian generally accepted auditing standards with U.S. GAAS if true.
9. Please provide five years of selected financial data or otherwise tell us why you are unable to provide data for the year ended September 30, 2002. Please refer to Item 3A1. of Form 20-F.
10. We note you have included selected financial data for interim periods. Please provide an indication, if true, that the interim period data is derived from unaudited financial information.

Capitalization and Indebtedness, page 16

11. Update your Capitalization table as of a date no earlier than 60 days prior to the filing of the registration statement. See Item 3.B. of Form 20-F.

Risk Factors, page 16

12. Revise risk factor subheadings so that they clearly identify the risk to be discussed. Several of your risk factor captions are too vague and generic to adequately describe the risk that follows. For example, simply stating "Mineral prices may not support corporate profit" does not disclose the resulting risk of harm to investors.
13. Throughout this section, rather than stating that there is or can be no assurance of or no guarantee of a particular outcome, state the extent of each risk plainly and directly. Also, specify the particular "adverse effect" that could occur as a result of the fact that you describe.

The expense of meeting environmental regulations..., page 18

14. Please provide a cross-reference to other disclosure that addresses the governmental rules and regulations, including federal, provincial and local government rules and regulations, which impact your business activities. For example, you state that you must obtain permits from various Mexican national/regional/local governmental authorities. In the new disclosure, discuss whether you have obtained such permits or the status of your application for the

permits and the regulatory body responsible for granting the permits. We may have further comments. See Item 4.B.8 of Form 20-F.

15. If material, inform us of your potential exposure to and the dollar amount of reserves established for exposure to environmental liabilities. We note that you may be unable to predict the ultimate cost of compliance or the extent of liability risks.

The Company's need for additional financing..., page 20

16. Disclose the length of time you estimate to be able to continue operations going forward with the cash you currently have. Please include the same discussion in Management's Discussion and Analysis of Financial Condition.
17. We note your disclosure that you believe to have sufficient funds to undertake your planned operations and exploration projects during Fiscal 2006. Please discuss the sufficiency of your funding with respect to planned operations and exploration projects during fiscal 2007. Where available, please provide quantitative as well as qualitative disclosure.

The Company has never declared or paid cash dividends..., page 24

18. Revise this risk factor to better address the risks of not declaring or paying cash dividends. For instance, it appears that the salient risk is that investors will realize a return on their investment only if your stock price appreciates, if at all.

Information on the Company, page 25

History and Progress of the Company, page 25

19. Please disclose the name and address of your agent in the United States, if any. See Item 4.a.3 of Form 20-F.

Incorporation and Name Changes, page 25

20. We note that you changed your name several times since inception. Disclose whether there were also changes to your business focus and management during those times.

Business Overview, page 28

Corporate Strategy, page 29

21. You have certain disclosure that requires independent support. For instance, your

statement that “Mexico has one of the world’s richest mineral endowments” needs to be supplemented with quantifiable data based on objective sources. Unless you can provide us with objective support for such statements, these assertions are not appropriate.

22. Please revise to clarify who or what are Penoles and Newmont and their relationship to your company, if any.
23. We note your disclosure that there is “strong evidence” that the Sonora area may cover “porphyry type targets as well as additional conventional targets.” Please disclose the nature of this evidence, such as where it comes from, who provided it, why it is strong, etc.
24. We note that your exploration programs are conducted under the direction of geologist Melvin Herdrick, MSc. Please identify him as an expert and file his consent to being named as such. See Item 10.G. of the Form 20-F.

Recent Property Acquisition/Exploration Activity, page 32

25. We note that you indicate payments that may be made pursuant to certain agreements. For instance, you have granted Inmet Mining an option to earn up to 70% of the Caborca copper project in return for payments. Please indicate whether these payments have been made or are still yet to be paid, as well as any shares that may or have been issued. We note your disclosure on page 63 that Inmet issued the first payment to Pediment for \$50,000 on January 25, 2007. Also, where practicable, disclose your estimates of completion for the necessary approvals, studies, and other conditions pursuant to your different option and joint venture agreements.
26. Further, in this regard, briefly describe the process by which your agreements may be approved. For instance, we note that your agreement with Inmet Mining is subject to regulatory approval.
27. Finally, please file the agreement with Inmet, or tell us why it is not required to be filed.

Property, Plant and Equipment, page 41

General

28. Please provide an introductory paragraph to this section that briefly and concisely summarizes the overall organization of this section, setting forth the major mineral properties, the nature of your interest in each property and the parcels that are considered part of such properties.

Operating and Financial Review and Prospects, page 57

29. Please expand your discussion and analysis of your results of operations to describe the activities by consultants for which you incurred consulting fees. Please explain your disclosure that states, "The consolidated losses in PODbook were in excess of the loss incurred in Pediment so the loss was taken directly into retained earnings." It appears from your disclosures that your operations associated with PODbook represented those of a wholly owned subsidiary and your primary business.

Critical Accounting Policies, page 59

30. Please expand your discussion of your critical accounting policies to include the critical methods, judgments and estimates associated with each policy you have identified. Your disclosure should specifically address why your assumptions and estimates bear the risk of change. Please refer to FRC 501.14 for guidance.

Liquidity and Capital Resources, page 61

31. Please specify an actual date through which you expect to have sufficient cash resources to meet your ongoing obligations as they become due. Stating that the Company is "able to meet its past and ongoing financial obligations at this time" is too vague in this regard.

Fiscal 2006 Ended September 30, 2006 vs. Fiscal 2005, page 62

32. We note your agreement with Inmet Mining Corp. Please remove statements that refer to your "extensive gold and silver holdings", as you appear to lack sufficient information and reserve determinations regarding your properties to make such claims.

Fiscal 2005 Ended September 30, 2005 compared to Fiscal 2004, page 65

33. We note your discussion of a Technical Report dated June 30, 2005 as revised on June 29, 2005, prepared by Roscoe Postle Associates Inc. We are unable to locate a consent of this named expert. Please refer to Item 10.G of Form 20-F and provide a consent with your next amendment. Otherwise, remove the reference to the report and its preparer in your amendment. Refer also to Instruction (iii) to Item 4.D of Form 20-F.
34. We note your disclosure regarding the changes in Other Income (Expenses). It appears from elsewhere in your document that these amounts related to gains on extinguishments of debt. Please revise your disclosure to clearly describe the nature of the items included in Other Income.

Directors, Senior Management and Employees, page 68

35. Revise to disclose a continuous 5-year business history without any gaps for each officer and director. For example, it is unclear when Mr. Aelicks held his different senior management positions at Napier Environmental Technologies Inc.
36. We note that you have identified Mr. Halvorson as a financial industry “expert.” Please file Mr. Halvorson’s consent to being named an expert. See Item 10.G. of the Form 20-F. Such statements should be supported by objective sources or otherwise deleted. Please revise accordingly.

Notice of Articles and Articles of Incorporation, page 87

37. Provide a more detailed disclosure in this section. For example, please:
 - disclose the percentage vote required to pass any resolution at a shareholder meeting, including an election of directors; and
 - identify the number of shareholders that must be present at a meeting to constitute a quorum.

In addition, please briefly summarize Sections 256 to 265 of the Business Corporations Act (British Columbia) relating to the action necessary to change the rights of your shareholders.

Material Contracts, page 90

38. Briefly describe the general nature of each contract, its terms and conditions, and the amount of consideration passing to or from the company or any other member of the group. See Item 10.C of Form 20-F.

Quantitative and Qualitative Disclosures about Market Risk, page 92

39. It appears from other disclosures in your document that you are susceptible to risks associated with foreign currencies. Please expand your disclosures of market risks to address your exposures related to foreign currency. Please refer to Item 11(a)(1) of Form 20-F for additional guidance.

Report of Independent Registered Public Accounting Firm, page 98

40. Please provide a signed opinion with your revised document.
41. Please provide an auditor’s report for the fiscal year ended September 30, 2004 that states, if true, the audit was conducted in accordance with U.S. Generally Accepted Auditing Standards.

Financial Statements

General

42. Please provide financial statements and related notes that include totals and subtotals for your financial statement captions.
43. It appears from your disclosures that you are an “exploratory stage” company under both Canadian and U.S. standards of disclosure for mineral projects. Please include disclosures including a statement contained in your financial statement headers indicating your stage of development. Please refer to Part 1- Definitions and Interpretation of NI 43-101, and SEC Industry Guide 7.

Consolidated Statements of Operations and Deficit, page 101

44. Please explain the adjustment reflected to your Deficit in 2005. Tell us why you have not included the amount in the determination of Net Income for the year. Otherwise, explain why the financial statements should not be restated to reflect this adjustment to your accumulated deficit.
45. Please modify your financial statement caption for “Liabilities written-off” to more clearly describe the line item. It appears from elsewhere in your document that the amount relates to gains of the extinguishment of debt.
46. Please provide an analysis of the changes in equity including your accumulated deficit for all years presented. We note from other disclosures including those on page 57 that indicate adjustments directly to your accumulated deficit. Refer to Item 8.A.1(c) of Form 20-F.

Consolidated Statements of Cash Flows, page 102

47. Please explain the line item included in your Financing Activities section described as “Settlement of debt for shares”. It appears this adjustment represents a non-cash event, and it is unclear why this amount is included in your statement.
48. Please explain the line item, “Adjustment for acquisition of subsidiary”. Tell us if this line item represents a cash outflow

Note 2 – Significant Accounting Policies

(j) – Foreign Currency Translation, page 106

49. We note your disclosure that indicates your functional currency for the company

and all its subsidiaries is the Canadian dollar under both Canadian and US GAAP. Please explain this conclusion with respect to your operations in Mexico. We note your disclosures of foreign currency translation adjustments.

Note 5(d) – Mineral Properties, page 110

50. Please explain your disclosure that indicates the transaction with Pitalla was to initially be accounted for as a reverse takeover. Please refer to EIC 10 and tell us how you were able to conclude that the transaction did not constitute a reverse merger.

Note 11 – Differences between Canadian and U.S. GAAP

(e) – Exploration expenditures, page 121

51. We note your policy regarding exploration expenditures under U.S. GAAP. Please note that for U.S. GAAP purposes, costs that are exploratory in nature shall be expensed as incurred regardless of the existence of reserves or the likelihood of commercial feasibility. This includes efforts to identify additional reserves within a concession often referred to as “near mine exploration”. Revise your policy accordingly.

(g) – Reconciliation of loss reported in Canadian GAAP and US GAAP, page 122

52. Please explain why you have not included an adjustment to arrive at U.S. GAAP comprehensive income relating to your foreign exchange translation. Please refer to paragraph 13, of SFAS 52.

Engineering Comments

General

53. As your web site contains disclosure about adjacent or other properties on which the company has no right to explore or mine, it would be helpful for you to include the following cautionary language along with such information:

“This web site contains information about adjacent properties on which we have no right to explore or mine. We advise U.S. investors that the SEC’s mining guidelines strictly prohibit information of this type in documents filed with the SEC. U.S. investors are cautioned that mineral deposits on adjacent properties are not indicative of mineral deposits on our properties.”

54. We also 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, accompany such disclosure with the following cautionary language, in bold type:

Cautionary Note to U.S. 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 strictly prohibit U.S. registered companies from including in their filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 20-F, File No. 000-52509, which may be secured from us, or from the SEC’s website at <http://www.sec.gov/edgar.shtml>.

55. Detailed sampling provides the basis for the quality estimate or grade of your mineral discoveries. Please provide a brief description of the sample collection, sample preparation, and the 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 programs. 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.

Coborca Copper-Gold Project, page 31, 55

56. With the passage of National Instrument 43-101 in Canada, disclosure using non-SEC reserve definitions and resource estimates is allowed for Canadian incorporated companies under the exception in Instruction 3 to Paragraph (b)(5) of Industry Guide 7. However, all mineral reserve or resource estimates that you disclose under this provision must meet the standards of National Instrument 43-101. Since you disclose on pages 31 and 55 this information is not in compliance with NI 43-101, please remove all such disclosure of this type from the filing.

Closing Comments

We remind you that the Form 20-F registration statement becomes effective automatically under the Exchange Act 60 days from the date of filing, and the Exchange Act reporting requirements become operative at that time.

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.

You may contact Kevin Stertzel at (202) 551-3723 or, in his absence, Jill Davis, Branch Chief, at (202) 551-3683 if you have questions regarding comments on the financial statements and related matters. Please contact Ken Schuler, Mining Engineer, at (202) 551-3718 if you have questions regarding comments on the engineering matters. Please contact Jason Wynn at (202) 551-3756 or, in his absence, me at (202) 551-3611 with any other questions. Direct all correspondence to the following ZIP code: 20549-7010.

Sincerely,

Anne Nguyen Parker
Branch Chief

cc: K. Stertzel
J. Davis

Mr. Gary Freeman
Pediment Exploration Ltd.
April 18, 2007
page 12

K. Schuler
J. Wynn

via facsimile
Dayna Caouette
(604) 669-0384