

Mail Stop 6010

November 27, 2006

Searchlight Minerals Corp.
c/o Camlex Management (Nevada) Inc.
8275 S. Eastern Avenue, Suite 200
Las Vegas, Nevada 89123

Re: Searchlight Minerals Corp.
Amendment No. 2 to Registration Statement on Form SB-2
Filed October 30, 2006
File No. 333-133929

Dear Sir or Madam:

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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

All references to prior Staff comments refer to our letter dated May 24, 2006.

General

1. Many of your responses to our prior comments simply state that you have "revised as requested." As noted in our letter, detailed cover letters greatly facilitate our review. In your future responses, please describe the revision made and exactly where it appears in your registration statement. If we are unable to identify where and how you have responded we will reissue the comment.

Fee Table

2. We note your response to our prior comment 5. Please reconcile your response that the selling stockholders “have all exercised their warrants to acquire [your] shares” with disclosure throughout your registration statement, including your Calculation of Registration Fee table and disclosure in your selling shareholder section that indicates that of the shares being registered 4.2 million shares will be issuable upon the exercise of warrants.

Prospectus

3. We note that your disclosure in your filings this year about your Clarkdale slag reprocessing project commonly reads as if it is a given that the project will be built. As noted in our prior comments 35 and 36, until such time as you have demonstrated the economic feasibility of your Clarkdale project with a bankable or final level of engineering feasibility study, please refrain from disclosing directly or indirectly that the project will be built. Until this level of study is completed and demonstrates that the project is economically feasible, your disclosure should always indicate that confidence in this project is conditional on the results of the feasibility study. Please revise accordingly; we reissue comments 35 and 36 as appropriate.
4. We reissue prior comment 6. We note defined terms in the first paragraph of the Summary, at “Selling Security Holders,” at “Organization Within Last Five Years” and at “Acquisition of Searchlight Claims,” among others. Please avoid reliance on defined terms like those in quotation marks and parentheses. If the terms are clear from context, the definitions are not necessary. If the terms are unclear, please clarify.

Summary, page 4

5. We note your response to prior comment 10. We reissue the comment. Disclose in this section why the number of shares outstanding decreased by over half. Revise the related party transaction discussion to discuss the reason for the share cancellation transaction with Mr. Matheson. What consideration, if any, did Mr. Matheson receive in return? Also, it is unclear where you responded to the second sentence of the prior comment.
6. Please tell us in your response letter the specific statutory authority you relied upon in effectuating a forward split without shareholder approval.

Selling Security Holders, page 11

7. We reissue our prior comment 15. For example, but without limitation, you have not identified the individuals who beneficially own the securities held in the name of Hebrides LP, Thomas O'Neill Management Corp., 0733480 BC Ltd., Coates Levine 1999 Trust, Centrum Bank AG, Bank Sal. Oppenheim Jr. & Cie (Switzerland Limited), Dominick & Dominick Securities Inc., Clarion Finanz, or S&P Investors.
8. Please provide the material relationship information required by Regulation S-B Item 507.
9. We reissue our prior comment 17. Please reconcile footnote 1 to your Calculation of Registration Fee table and the first paragraph on page 11 under the caption "Selling Security Holders" with the disclosure you have provided on pages 11 and 12 and the information you have provided in Appendix A. For example, but without limitation, footnote 1 indicates you are registering 15,115,000 shares of your common stock issued in your September 2005 and January 2006 private placements. However, according to your disclosure on pages 11 and 12 and the information in Appendix A, you issued a total of 16,150,000 shares in such private placements, excluding shares of common stock that you issued to Dominick & Dominick and Clarion Finanz AG in consideration of their services as agents for the September private placements. As another example, the number of shares described in paragraphs 1 through 11 on pages 11 and 12 as being sold pursuant to this registration statement do not appear to total the 24,355,000 shares you have actually registered. As a third example, footnote 1 indicates that you are registering 3,640,000 shares of your common stock purchased by certain of your selling stockholders from an affiliate stockholder, yet paragraph 9 on page 12 indicates that selling stockholders purchased 2,840,000 shares from Mr. Matheson, an affiliate. Please reconcile the number of securities disclosed on pages 11 and 12 with the number of securities described in your fee table.
10. Revise paragraph 1 on page 11 to indicate that the 1,400,000 shares described in the paragraph is as adjusted to reflect the two for one forward stock split effected September 30, 2005.
11. We note your disclosure in paragraph 10 on page 12. Please tell us in your response letter why penalty units issued on February 9, 2006 were deemed exercised as of earlier dates. What was the purpose for doing this? Explain how a holder of such warrants was able to exercise such warrants prior to their issuance.
12. Revise paragraph 10 on page 12 to quantify the aggregate number of shares comprising the penalty units.

13. You indicate in paragraph 11 on page 12 that you issued 8,506,000 shares of your common stock upon the exercise of *all* of the warrants issued in the September 2005 private placements. However, this total does not appear to represent the total number of shares issuable upon exercise of the warrants described in paragraphs 2, 3, 4, 6, 7 and 10 on pages 11 and 12. Please reconcile these two totals. We also note that some of the subscribers listed in paragraph 10 of Appendix A who received shares upon exercise of warrants are not located in the tables in paragraphs 2, 3 and 4 of Appendix A. Please reconcile.
14. We note your response to our prior comment 20. Please explain how Mr. Matheson was able to rely on section 4(2) of the Securities Act of 1933. Please also provide the facts that supported Mr. Matheson's reliance on Regulation S. Elaborate on the nominal consideration that Mr. Matheson received in exchange for his shares. Did he receive any non-monetary consideration of value? Please provide us any written documentation pursuant to which these transactions were consummated. In addition, you did not provide a response to the second bullet point of our prior comment 20. We reissue the comment. We may have further comments upon review of your response.

Directors, Executive Officers... page 19

15. We reissue prior comment 23 as to Mr. Ager. Please provide a more complete description of the business of CSA Management Corp., such as annual revenues and number of employees.
16. For Mr. McNeil, please provide a more complete description of the business of Nanominerals, such as product or service, annual revenues and number of employees. Also we reissue prior comment 24 as to the description of the businesses he has started.

Security Ownership... page 21

17. Please revise the first table to attribute beneficial ownership of shares held by Nanominerals to Mr. Ager and to Mr. McNeil.
18. In the second table please clarify the nature of Nanominerals' ownership interest in 16 million common shares, and how and when they were acquired. At page 25 you indicate Nanominerals received 6 million pre-split warrants, 10 million post-split warrants and another 2 million warrants, and that the warrants were subsequently transferred by Nanominerals.

Experts, page 24

19. We note the consents you have attached to the amendment. Please disclose these individuals in the “Experts” section.

Organization Within the Last Five Years, page 24

Nanominerals Corp, page 24

20. Revise to explain the consideration received by the company in each of the issuances of warrants to Nanominerals.
21. Describe to whom and for what consideration the warrants issued to Nanominerals were transferred. Disclose who currently owns those warrants.
22. As applicable, apply these comments to disclosure under “Certain Relationships and Related Transactions” at page 50.
23. Tell us why you are claiming the Regulation S exemption for the 2 million warrants.

Introduction, page 25

24. Please revise to clearly explain the reasons the company appears to have determined to postpone exploitation of the Searchlight gold claims and instead pursue the Clarksdale project. We note, for example, that the February 2005 restructuring of the company apparently resulted from Mr. Matheson’s desire to seek a public entity to exploit mining claims owned by his affiliates. However, in June 2005 the company’s focus appears to have shifted to acquiring assets and operating personnel from Nanominerals.

Corporate History, page 26

25. Refer to prior comment 32 and your response. Please disclose the information provided in your response.

Description of Property, page 29

Clarksdale Slag Project, page 29

26. Refer to prior comment 39. It is unclear where you responded to the first bullet point.

27. It is unclear where you responded to prior comment 42.
28. Please revise to present a table showing what each joint venture partner is contributing to the venture, and what each is entitled to take away from the venture.
29. You disclose that “we” drilled the 18 holes in the slag pile. Please clarify who did the actual drilling and sampling.

Clarkdale Slag Project, page 29 & 33

30. We note your response to our previous comment number 38 concerning the Clarkdale project and the new drilling and assay results. Using tables and other means:
 - Please clarify which samples were analyzed by which processes and by whom, and clarify the quantities of your bulk samples.
 - Clarify why the precious metals were not assayed by Mountain States who collected the samples, who has a registered assayer in Arizona, and why traditional fire assay procedures were not used in the analysis of the precious metals.
 - Review each element of our previous comment number 38 and ensure that each element is addressed.
31. As supplemental information, for all 18 drill holes and bulk samples for your Clarkdale project please provide:
 - Drill hole logs, and assay results with assay certificates,
 - Written descriptions or copies of reports that describe your drilling and sampling program, including the following:
 - Drilling and sampling procedures,
 - Quality control program,
 - Chain of custody procedures, and
 - Assay lab’s quality control plan.

Acquisition of Clarkdale Slag Project, page 30

32. Concerning the Clarkdale Slag Project, please:
- Clarify whether you are required to fund all phases of the project, and that in essence Verde River Iron Company will have a 50 percent carried interest in the joint venture, assuming you make all payments and conditions.
 - Confirm or clarify if the Verde River Iron Company is only committing two thirds of the slag to the joint ventures, as indicated in the Hewlett study of June 1, 2005.
 - Clarify in the table on page 32 that the costs disclosed for Phase 3 are very preliminary estimates developed for purposes of the agreement, and that actual costs may be significantly higher, as the bankable feasibility study has not been conducted as yet.

Metallurgy, page 33

33. Revise to clarify who conducted the testing from 1991-2005 referred to in the first sentence and the reasons for this effort. Disclose what levels of commercially viable mineralization were discovered, if any.
34. Please revise to more clearly distinguish between evaluations conducted by others, an evaluations conducted by you.
35. Clarify the sources of the technical information in the first paragraph.
36. Explain the term “blebs.”

Permitting and Design, page 33

37. Concerning this section, please:
- Revise your disclosure to remove statements that are not supported by your drilling program and a bankable feasibility study
 - Clarify whose pilot plant you used in Phoenix.

Location, Access and History of Exploration, page 37

38. Refer to prior comment 48 and your response. Please provide to us copies of the sources you cite as supporting the information regarding 250,000 ounces of gold produced from 1900-1950 in this region, and claims for specific mineralization at the Searchlight claim.

Management's Discussion, page 43

Plan of Operation, page 43

39. Please replace the vague disclosure represented by the word "certain" in the first paragraph with specific discussion and analysis of your material obligations.

Results of Operations, page 44

40. Refer to prior comment 52 and your response. Please include the information in your response in your disclosure.

Certain Relationships, page 50

41. We reissue the last sentence of our prior comment 56. Disclose the actual amount paid under the agreement in *each* of the last two years.
42. Please revise to explain what you mean by the term "dated for reference" in the third paragraph.
43. Refer to prior comment 58 and your response. Please revise to explain in greater detail the business purpose of Mr. Harlinton's transfer of 47,700,000 shares of Phage Genomics to Mr. Matheson, given that Mr. Harlinton received nominal consideration. Describe the terms of that transaction and quantify such consideration, both monetary and if applicable, non-monetary. Please also tell us whether there existed any relationship between Messrs. Harlinton and Matheson outside of the business relationship resulting from the transfer of the 47,700,000 shares. State the percentage interest Mr. Harlinton's shares represented in Phage Genomics' outstanding voting shares, and when the transactions were approved by its board of directors. Briefly describe the merger transactions or other legal actions taken which "restructured" Phage Genomics into the current Searchlight Minerals, Inc. Describe the steps taken to transfer executive authority to Mr. Matheson. In addition, please explain how Mr. Harlinton was able to rely on section 4(2) of the Securities Act of 1933.
44. Refer to prior comment 59 and your response. It is unclear where you responded to the comment. For example, it is not sufficient to say "agreed upon price" when describing related party transactions.
45. Refer to prior comments 58 and 61 and your responses. It is unclear how control of Phage Genomics was transferred to Mr. Matheson without any written agreements. Please explain.

46. Please describe the transaction in which Mr. Matheson returned 35 million shares for cancellation.
47. We reissue our prior comment 62. It does not appear you have given retroactive effect to *all market prices* resulting from the split. Revise footnote (1) accordingly.

Financial Statements for the year ended December 31, 2005

48. Please update the financial statements as required by Item 310(g) of Regulation S-B.

Note 1. Description of Business, History and Summary of Significant Policies, page 6 History

49. Refer to prior comment 74 in our letter dated May 24, 2006. Your response states that you did not account for the reorganization from a biotech to mineral exploration company as discontinued operations because the former business never commenced operations. Paragraph 42 of SFAS 144 does not specify whether the business must have commenced operations to be classified as discontinued operations, but rather defines a component of an entity as having operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes from the rest of the entity. Please tell us why you should not report the biotech research and development company as a discontinued operation.

Note 3. Mining Concessions, page 10

50. We note your response to prior comment 71 in our letter dated May 24, 2006. Regarding the acquisition of mining concessions in Searchlight, Nevada, tell us why you assigned a value of \$2,000 per claim (an agreed upon price) rather than the fair value of the 5.6 million shares of stock to be issued based upon traded market prices. Tell us how you determined whether the fair value of the consideration given or the fair value of the asset acquired was more clearly evident and, thus, more reliably measurable as required by paragraph 6 of SFAS 141. In addition, clarify why there is "no stated value for such a share block" and tell us why you believe \$2,000 per claim is a valid and supportable estimate of the value of the consideration. Please refer to paragraphs 22 and 23 of SFAS 141.
51. Please tell how you have complied with the requirements of SFAS 144 related to the possible impairment of the mining concession and joint venture agreement assets.

52. As a related matter, we see that you issued only 1.4 million shares of the 5.6 million share purchase price at the purchase date. It appears that if you do not issue the remaining shares, you forfeit the rights to the mining concessions. Since you state that the full value of the transaction was recorded at the purchase date, tell us how you are accounting for the issuance of the additional shares of stock. Tell us if it will be recorded as additional purchase price. Please support your accounting by referring to the appropriate accounting literature.

Note 4. Joint Venture Agreement, page 10

53. We reference your response to prior comment 76 in our letter dated May 24, 2006. Please support the basis for capitalizing the \$690,000 payment to reimburse NMC since this joint venture has not been formed. Tell us why you believe this asset is recoverable. Please also discuss how you accounted for the warrants issued to NMC for their interest in the joint venture agreement. Address your current and future accounting for the joint venture agreement asset. Also, your footnotes should disclose how you are accounting for all payments to be made to the joint venture.
54. As a related matter, please revise your filing to disclose the status of the joint venture since it appears you only have the option to earn a 50% interest in the joint venture subject to certain conditions. Additionally, please disclose how you intend to account for the joint venture once formed. We refer you to provisions of FIN 46.

Note 6. Loan Payable – Related Party, page 12

55. Refer to your response to prior comment 77 in our letter dated May 24, 2006. Please demonstrate to us that the accrual of imputed interest is not material to the financial statements. Refer to SAB 99.

Note 8. Stockholder's Equity, page 12

56. We note your response to prior comment 78 in our letter dated May 24, 2006. You state that the shares issued for cancellation of debt were valued at the "negotiated number of shares necessary to satisfy the debt holder." Tell us why the reacquisition price should not be based upon the fair value of the stock at the date of debt extinguishment. Additionally, please clarify whether you should record a gain or loss on the extinguishment of debt. Refer to paragraph 20 of APB 26 which states that the difference between the reacquisition price and the net carrying amount of extinguished debt should be recognized currently in income of the period of extinguishment as a loss or gain.

Unaudited Financial Statements for the six months ended June 30, 2006

Note 5. Stockholder's Equity, page F-8

57. Refer to your response to prior comment 70 in our letter dated May 24, 2006. Please clarify whether there are any circumstances in which you would be required to issue any additional penalty units pursuant to the private placements completed in September 2005. If so, please revise to disclose those obligations and the maximum amount that would be payable.
58. We see that you issued 50,000 shares at \$2.06 per share as consideration to your new Chief Financial Officer. Please tell us and revise your filing to disclose the basis for the value ascribed to these shares. Note that paragraph 10 of SFAS 123-R states that the cost of services received from employees in exchange for awards of share-based compensation generally should be measured based on the grant-date fair value of the equity instruments issued or on the fair value of the liabilities incurred.

Recent Sales of Unregistered Securities, page 60

59. As to paragraph number 3, state the exemption claimed as to U.S. holders.

Exhibits, page 63

60. Please file as exhibits all of the agreements pursuant to which you issued or sold the securities described in the transactions disclosed on pages 11, 12 and 60.

As appropriate, please amend your registration statement in response to these comments. 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.

Searchlight Minerals Corp.
c/o Camlex Management (Nevada) Inc.
November 27, 2006
Page 12

You may contact Kristin Lochhead at (202) 551-3664 or Brian Cascio at (202) 551- 3676 if you have questions regarding comments on the financial statements and related matters. You may contact Roger Baer at (202) 551-3705 regarding engineering comments. Please contact Alan Morris at (202) 551-3601 or me at (202) 551-3444 with any other questions.

Sincerely,

Perry Hindin
Special Counsel

cc. Conrad Nest
VIA TELEFAX (604) 687-6650