

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
450 Fifth Street, N.W.
Washington, D.C. 20549**



October 8, 2004

Via U.S. Mail and Facsimile

Stephen N. Landsman, Esq.
General Counsel
Nalco Holding Company
1601 West Diehl Road
Naperville, IL 60563

**Re: Nalco Holding Company
First Amendment to Registration Statement on Form S-1
File No. 333-118583
Filed September 22, 2004**

Dear Mr. Landsman:

We have reviewed your filing and have the following comments. Please note that we have limited our review to transactional matters. 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.

CF1-00009868

General

1. We note your responses to comments 1 and 2 in your September 22 letter.
2. In a letter of supplemental information, please discuss the expected accounting treatment for the issuance of the warrants referenced on page 107. Also, please discuss whether compensation expense will be recognized in connection with the put rights afforded under the Management Members Agreement. It appears that the put right takes effect upon consummation of this IPO, and that, therefore, the value of this right may need to be recognized. It is our understanding that, after the IPO, the registrant's managers will be able to exchange their equity units in the parent and receive shares of the registrant's stock in an amount equal to its then fair market value. It appears that this may be a modification as contemplated by paragraph 36 of SFAS 123. The value thereof may need to be recognized in the registrant's Income Statement as compensation, given the nature of the arrangement and the guidance in paragraph 15 of SFAS 123. The estimated amount of any compensation charge would need to be disclosed in the pro forma financial statements or the footnotes thereto. In your response, please also tell us when the units were acquired by the managers, the cash price they paid for the units, and the EBITDA targets that govern vesting of the units. Please also tell us the number of shares of the registrant's stock that would be issued to redeem all of the vested Class A units, based on the assumed IPO price. We may have further comment.

Underwriting, page 126

3. Please add to the document the second sentence of your response to comment 7 in your September 22 letter.
4. Please briefly discuss the lock-up, and add to the document your response to comment 8 in your September 22 letter.

Closing comments

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 supplemental 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 filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert this action as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

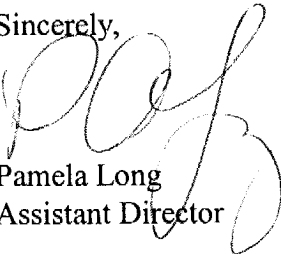
In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Amanda Gordon at (202) 942-1945 with any questions.

Sincerely,



Pamela Long
Assistant Director

cc: Edward P. Tolley III, Esq., Simpson Thacher & Bartlett LLP