



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-0405

April 13, 2005

via U.S. Mail

Kathleen L. Quirk  
Senior Vice President and Treasurer  
McMoRan Exploration Co.  
1615 Poydras Street  
New Orleans, Louisiana 70112

**Re: McMoRan Exploration Co.**  
Form S-3/A filed March 29, 2005  
File No. 333-121779

Form 10-K for the fiscal year ended December 31, 2004  
Filed March 15, 2005

Response Letter dated March 18, 2005

Dear Ms. Quirk:

We have reviewed the above filing and response letter and have the following comments. We have limited our review to the areas commented on below. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or revision is unnecessary. Please be as detailed as necessary in your explanation.

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.

**Form S-3**

Selling Securityholders, page 46

1. We note your response to our prior comment 2 and the revised disclosure pertaining to JP Morgan Securities Inc ("JP Morgan") contained in footnote (n) to the Selling Securityholder table. The revisions do not clarify that JP Morgan is an underwriter.

Based on your response, it would appear that the registrable securities received by JP Morgan were not a part of the “customary compensation” provided to JP Morgan as compensation for underwriting activities. As such, it appears that JP Morgan should clearly be identified as an underwriter in the prospectus. Please revise or advise.

2. Please indicate whether SG Americas Securities, LLC received its shares as compensation for underwriting activities. If SG Americas Securities, LLC did not receive the registrable securities as compensation for underwriting activities, then as noted in our prior comment 2, you will need to revise the disclosure to reflect that SG Americas Securities LLC is an underwriter.

### **Engineering Comments**

#### **Form 10-K as of December 31, 2004**

#### Oil and Gas Operations

3. We could not find the gross and net number of productive oil and gas wells that you have. In future filings please include this disclosure. See Industry Guide 2 for further guidance.

#### Supplementary Oil and Gas Information

##### Standardized Measure of Discounted Future Net Cash Flows

4. We note that you did not include future income taxes in the calculation of the Standardized Measure. Supplementally, please explain to us why you believe your methodology of calculation is correct.

#### Closing Comments

As appropriate, please respond to this letter within 10 business days or tell us when you will provide us with a response. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your response 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.

Please direct all engineering questions to James Murphy, Petroleum Engineer, at (202) 942-2935. Please direct all other questions to Mellissa Campbell Duru, at (202) 942-1930, or in her absence, to Tangela Richter, Branch Chief, at (202) 942-1837. Direct all correspondence to the following ZIP code: 20549-0405.

Sincerely,

H. Roger Schwall  
Assistant Director

cc: via facsimile  
Douglas Currault II, Esq.  
Jones, Walker, Waechter  
Poitevent, Carrière & Denègre, L.L.P  
504-589-8412 (fax)

T. Richter  
M.Duru  
J. Murphy