



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

DIVISION OF  
CORPORATION FINANCE

August 4, 2010

Donald C. Ewigleben  
President  
Uranium Resources, Inc.  
405 State Highway Bypass 121  
Building A, Suite 110  
Lewisville, Texas 75067

**Re: Uranium Resources, Inc.  
Form 10-K for Fiscal Year Ended December 31, 2009  
Filed March 16, 2010  
Schedule 14A Definitive Proxy Statement  
Filed April 27, 2010  
File No. 1-33404**

Dear Mr. Ewigleben:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2009

General

1. We note the prospectus supplement pursuant to Rule 424(b)(5) dated June 21, 2010. We are unable to locate an unqualified legality opinion for this offering of 23,809,500 shares of your common stock covered by the shelf registration statement filed on Form S-3, file number 333-166647, declared effective on May 21, 2010. Please file the unqualified opinion in a Form 8-K or by post-effective amendment, or advise. For guidance, please refer to Question 212.05 of the Securities Act Rules Compliance and Disclosure Interpretations, available on our website at:  
<http://www.sec.gov/divisions/corpfin/cfguidance.shtml>.

Definitive Proxy Statement on Schedule 14A

General

2. Please confirm in writing that you will comply with the following comments relating to your proxy in all future filings, and provide us with an example of the disclosure you intend to use in each case. After our review of your responses, we may raise additional comments.
  
3. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K, although you state on page 12 that “[t]he Compensation Committee oversees the compensation of [your] chief executive officer and other executive officers and evaluates the appropriate compensation incentives to motivate senior management to grow long-term shareholder returns without undue risk-taking.” Please advise us of the basis for your conclusion that disclosure in response to this item is unnecessary and describe the process you undertook to reach that conclusion.

Compensation Discussion and Analysis, page 14

Elements of the Company’s Compensation Plan, page 14

(ii) Performance Goals, page 15

4. We note your disclosure that you measure your financial performance against certain operational, cost, and budget targets, and your non-financial performance against certain performance goals and core values. You further disclose that when the company’s performance does not meet key financial and non-financial objectives, “named executive officers should be paid less than expected levels.” Your related disclosure indicates that bonus compensation and non-equity incentive plan compensation were not awarded during your fiscal year ended December 31, 2009. With a view toward disclosure, please disclose the key financial and non-financial targets and objectives (assuming you set targets and objectives for compensation purposes last year) and the actual results attained. To the extent you believe that disclosure of such quantitative or qualitative performance information would result in competitive harm, such that the information should be excluded pursuant to Instruction 4 to Item 402(b) of Regulation S-K, please provide to us a detailed explanation regarding such conclusion. If you have an appropriate basis for omitting this information, you must discuss the difficulty or likelihood of the company to attain the undisclosed performance targets and objectives. Refer to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations, available at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>.

Closing 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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

Please contact Tracey L. McNeil at (202) 551-3392, Alexandra M. Ledbetter at (202) 551-3317, or me at (202) 551-3740 with any other questions.

Sincerely,

H. Roger Schwall  
Assistant Director