UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (date of earliest event reported): September 21, 2004

USEC Inc.

(Exact name of registrant as specified in its charter)

1-14287

(Commission file number)

Delaware

52-2107911

 $(State\ of\ incorporation)$

(I.R.S. Employer Identification No.)

2 Democracy Center 6903 Rockledge Drive Bethesda, MD 20817 (301) 564-3200

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:	
□ W ₁	ritten communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
□ So	liciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
□ Pre	e-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
□ Pre	e-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

On September 21, 2004, USEC Inc. entered into an agreement effective as of September 24, 2004 with Sydney M. Ferguson, a Senior Vice President of the Company, relating to her resignation of employment with the Company. Under the terms of the agreement, Ms. Ferguson will receive a payment of \$100,000.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

By /s/ Ellen C. Wolf

Ellen C. Wolf

Senior Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)