SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(B) OR 12(G) OF THE SECURITIES EXCHANGE ACT OF 1934

USEC INC.

(Exact name of registrant as specified in its charter)

DELAWARE

52-2107911 --------(IRS Employer Identification No.)

(State of Incorporation or Organization)

2 DEMOCRACY CENTER 6903 ROCKLEDGE DRIVE BETHESDA, MD 20817 (Address of principal executive offices) (Zip code)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box. [] If this form relates to registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), please check the following box. []

Securities Act registration statement file number to which this form relates:

333-67117

(If applicable)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of Each Class to be so RegisteredName of Each Exchange on Which Each------Class is to be Registered

None

None

Securities to be registered pursuant to Section 12(g) of the Act:

% Senior Notes Due
----(Title of Class)

ITEM 1. DESCRIPTION OF REGISTRANT'S SECURITIES TO BE REGISTERED.

The description under the heading "Description of the Notes" relating to the Registrant's % Senior Notes Due, contained in the Registrant's Prospectus included in the Registration Statement on Form S-1 (No. 333-67117) (the "Registration Statement"), filed by the Registrant with the Securities and Exchange Commission, is incorporated herein by reference.

ITEM 2. EXHIBITS.

- Certificate of Incorporation of USEC Inc. (Incorporated by reference to Exhibit 3.1 to the Registrant's Annual Report on Form 10-K for the year ended June 30, 1998).
- Bylaws of USEC Inc. (Incorporated by reference to Exhibit 3.2 to the Registrant's Annual Report on Form 10-K for the year ended June 30, 1998).
- Form of Indenture between USEC Inc. and First Union National Bank (Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement).

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

USEC Inc.

Date: January 11, 1999

By: /s/ HENRY Z SHELTON Name: Henry Z Shelton, Jr. Title: Senior Vice President and Chief Financial Officer