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: November 25, 2003

Date of Earliest Event Reported: November 25, 2003

MILLENNIUM CHEMICALS INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of

1 12091 (Commission File Number) 22-3436215 (I.R.S. Employer Identification Number)

incorporation or organization)

20 Wight Avenue, Suite 100 Hunt Valley, Maryland 21030

(Address of principal executive offices)

 $Registrant \ \ s \ telephone \ number, including \ area \ code \ (410) \ 229\text{-}4400$

Item 5. Other Events and Required FD Disclosure.

On November 25, 2003, Millennium Chemicals Inc. consummated the sale of \$125 million aggregate principal amount of its 4% Convertible Senior Debentures due 2023. Interest on the debentures will be paid semi-annually on May 15 and November 15.

The debentures will rank equal in right of payment with all of Millennium s existing and future senior unsecured indebtedness and will be effectively subordinated to all existing and future liabilities of Millennium s subsidiaries other than Millennium America Inc., which is guaranteeing payments on the debentures.

Holders may convert their debentures into shares of Millennium common stock at a conversion price, subject to adjustment upon certain events, of \$13.632 per share, which is equivalent to a conversion rate of 73.3568 shares per \$1,000 principal amount of debentures. The conversion privilege may be exercised under the following circumstances:

prior to November 15, 2018, during any fiscal quarter commencing after December 31, 2003 if the closing price of Millennium common stock on at least 20 of the 30 consecutive trading days ending on the first trading day of that quarter is greater than 125% of the then current conversion price;

on or after November 15, 2018, at any time after the closing price of Millennium common stock on any date is greater than 125% of the then current conversion price;

if the debentures are called for redemption;

upon the occurrence of specified corporate transactions, including a consolidation, merger or binding share exchange pursuant to which Millennium common stock would be converted into cash or property other than securities;

during the five business-day period after any period of ten consecutive trading days in which the trading price per \$1,000 principal amount of debentures on each day was less than 98% of the product of the last reported sale price of Millennium common stock and the then current conversion rate; and

upon certain credit rating events.

The debentures are redeemable at Millennium s option beginning November 15, 2010 at a redemption price equal to 100% of their principal amount, plus accrued interest, if any. On November 15 in each of 2010, 2013 and 2018, holders of debentures will have the right to require Millennium to repurchase all or some of the debentures they own at a purchase price equal to 100% of their principal amount, plus accrued interest, if any. Millennium may choose to pay the purchase price in cash or shares of Millennium common stock (valued for those purposes at 97.5% of their average closing price during a specified trading period) or any combination thereof. Holders of the debentures will also have the right to require Millennium to repurchase all or some of the debentures they own at a cash purchase price equal to 100% of their principal amount, plus accrued interest, if any, upon the occurrence of certain events constituting a fundamental change.

The debentures were offered and sold only to qualified institutional buyers in reliance on Rule 144A under the Securities Act of 1933. The debentures and the shares of common stock issuable upon conversion of the debentures have not been registered under the Securities Act or any state securities laws. Unless so registered, the debentures and the shares of common stock issuable upon conversion of the debentures may not be offered for sale or sold except pursuant to an exemption from the registration requirements of the Securities Act and applicable state securities laws. The foregoing summary of the terms of the debentures is qualified in its entirety by reference to the indenture pursuant to which the

debentures have been issued, a copy of which has been filed as an exhibit to this Current Report.

Upon the completion of the offering, Millennium used approximately \$47 million of the gross proceeds to repay all of the secured term loans outstanding under the Credit Agreement, dated as of June 18, 2001, among Millennium America and certain other subsidiaries of Millennium Chemicals, as borrowers, Millennium Chemicals, as guarantor, and various lending institutions. The balance of the gross proceeds were used to repay outstanding revolving credit borrowings under the Credit Agreement. As a consequence of the sale of the debentures and application of the proceeds as described, the amendment of the Credit Agreement described in Millennium s Quarterly Report on Form 10-Q for the quarter ended September 30, 2003 has become effective. A copy of that amendment has been filed as an Exhibit to this Current Report.

SIGNATURES

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

Dated: November 25, 2003

MILLENNIUM CHEMICALS INC.

By: /s/ C. WILLIAM CARMEAN

C. William Carmean Senior Vice President, General Counsel & Secretary

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EXHIBIT INDEX

Exhibit No.	Description
4.1	Indenture, dated as of November 25, 2003, among Millennium Chemicals Inc., Millennium America Inc. and the Bank of New York, as Trustee.
4.2	Amendment No. 4 to the Credit Agreement, dated as of June 18, 2001, as amended, among Millennium America, as borrower, Millennium Inorganic Chemicals Limited, as borrower, certain borrowing subsidiaries of Millennium Chemicals from time to time party thereto, Millennium Chemicals, as guarantor, the lenders from time to time party thereto, the issuing banks from time to time party thereto, JP Morgan Chase Bank, as administrative agent and collateral agent and Bank of America, N.A., as syndication agent.