

**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): August 20, 2004

MISSISSIPPI CHEMICAL CORPORATION
(Exact name of Registrant as specified in its charter)

Mississippi
(State or other
jurisdiction of incorporation)

001-12217
(Commission File Number)

64-0292638
(I.R.S. Employer
Identification Number)

**3622 Highway 49 East
Yazoo City, Mississippi**
(Address of principal
executive offices)

39194
(Zip code)

Registrant's telephone number, including area code: **(662) 746-4131**

Not Applicable
(Former name or former address, if changed since last report)

Item 1.01. Entry into a Material Definitive Agreement.

On August 20, 2004, the registrant entered into the Second Amendment to Term Loan, Revolving Credit, Guarantee and Security Agreement, dated as of July 1, 2004, among the registrant, as borrower; the subsidiaries of the registrant party thereto, as guarantors; the several banks and other financial institutions or entities from time to time parties thereto, as lenders; Citicorp North America, Inc., as administrative agent for the lenders; and Citigroup Global Markets Inc., and Perry Principals Investments LLC, as joint lead arrangers. The Second Amendment extends from August 23, 2004, to September 24, 2004, the time period by which the registrant must file an amended plan of reorganization with the U.S. Bankruptcy Court for the Southern District of Mississippi to remain in compliance with said Agreement.

Item 9.01. Financial Statements and Exhibits.

(c) Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
10.1	Second Amendment, dated as of August 20, 2004, to Term Loan, Revolving Credit, Guarantee and Security Agreement, dated as of July 1, 2004, among Mississippi Chemical Corporation, as borrower; the subsidiaries of Mississippi Chemical Corporation named therein, as guarantors; the lenders from time to time party thereto; Citicorp North America, Inc., as administrative agent; and Citigroup Global Markets Inc. and Perry Principals Investments, LLC, as joint lead arrangers.

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.

MISSISSIPPI CHEMICAL CORPORATION

By: /s/ Timothy A. Dawson
Name: Timothy A. Dawson
Title: Senior Vice President and Chief Financial Officer

Date: August 25, 2004

EXHIBIT INDEX

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