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): July 30, 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 5. Other Events.

On July 30, 2004, the registrant amended its \$182.5 million replacement debtor-in-possession credit facility (the "Replacement DIP") to extend from July 31, 2004, to August 23, 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 the Replacement DIP, and to make certain revisions to the registrant's cash management system.

Item 7. Financial Statements and Exhibits.

(c) Exhibits.

Exhibit Number Description

10.1 First Amendment to Term Loan, Revolving Credit, Guarantee and Security Agreement, dated as of July 30, 2004, among Mississippi Chemical Corporation as Borrower, the Subsidiaries of Mississippi Chemical Corporation named therein as Guarantors, the Lenders 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 3, 2004

EXHIBIT INDEX

Exhibit Number Description

10.1 First Amendment to Term Loan, Revolving Credit, Guarantee and Security Agreement, dated as of July 30, 2004, among Mississippi Chemical Corporation as Borrower, the Subsidiaries of Mississippi Chemical Corporation named therein as Guarantors, the Lenders party thereto, Citicorp North America, Inc. as Administrative Agent, and Citigroup Global Markets Inc. and Perry Principals Investments, LLC, as Joint Lead Arrangers.