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): October 16, 2006

eMERGE INTERACTIVE, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction

000-29037 (Commission File Number) 65-0534535 (IRS Employer

of incorporation)

Identification No.)

10305 102nd Terrace

Sebastian, FL (Address of principal executive offices)

32958 (Zip Code)

Registrant s telephone number, including area code: (772) 581-9700

N/A

(Former Name or Former Address, if Changed Since Last Report)

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:

- " Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- x Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-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.

Merger Agreement

On October 16, 2006, eMerge Interactive, Inc., a Delaware corporation (<u>eMerge</u>), eMerge Merger Sub, LLC, a Delaware limited liability company (<u>Merger Sub</u>), PRIME BioSolutions, LLC, a Delaware limited liability compan<u>y</u> (<u>PRIME</u>), and Prime BioShield, L.L.C., a Nebraska limited liability company (<u>Shield</u>), entered into an Agreement and Plan of Merger (the <u>Merger Agreement</u>) pursuant to which PRIME will be merged with and into Merger Sub (the <u>Merger</u>), with Merger Sub being the surviving entity. Upon completion of the transaction, eMerge will change its name to PRIME BioSolutions, Inc. (the <u>Company</u>) and will be headquartered in Omaha, Nebraska. A copy of the Merger Agreement is attached hereto as <u>Exhibit 2.1</u> and is incorporated herein by reference. A copy of the press release announcing the Merger Agreement is attached hereto as <u>Exhibit 99.1</u> and is incorporated herein by reference. The description of the Merger Agreement set forth herein and in the attached press release is qualified in its entirety by reference to <u>Exhibit 2.1</u>.

Under the terms of the Merger Agreement, Shield s 100% membership interest in PRIME will be converted into the right to receive a number of shares of eMerge common stock equal to (i) 58,321,743 shares of eMerge common stock less (ii) the number of shares of eMerge common stock issuable upon full conversion of any Company securities to be issued to the new investors described in the next paragraph (the New Investors of eMerge common stock will remain outstanding and, following the conversion of all securities issued to the New Investors into shares of eMerge common stock, the currently outstanding shares of eMerge and all warrants and stock options outstanding immediately after the merger would represent 7.5% of the outstanding shares, warrants, and options of the Company. Options to acquire 283,365 shares of common stock, representing all outstanding employee options will be cancelled at closing. Options to acquire 193,203 shares of common stock will be issued to officers and employees of eMerge with an exercise price equal to the closing sale price of eMerge common stock on the day prior to the closing date of the Merger.

The closing of the Merger is conditioned upon the receipt of commitments from New Investors to invest \$70 million of additional capital in the Company in exchange for equity securities of the Company, which may be in the form of common stock, preferred stock or convertible debt. \$10 million of this additional capital is to be invested in the Company concurrently with the closing of the Merger. The remaining \$60 million may be invested thereafter as the Company achieves milestones in the construction of its planned ethanol plants.

The closing of the Merger also is conditioned upon the execution of an agreement whereby an affiliate of the Company s expected management team will agree, subject to certain limitations, for a period of three years, to cause the entity that owns the North American licensing rights to patented Integrated BioRefinery (<u>IB</u>R) technology (which entity is also an affiliate of the Company s expected management team) to grant to the Company, on a plant-by-plant basis, non-exclusive perpetual licenses for the right to use the IBR technology at IBR ethanol plants the Company constructs in the future for a royalty fee of \$750,000 per year, per plant beginning on

the commencement of operations at each plant. Pursuant to such agreement, the Company s right to obtain such licenses for future plants is conditioned upon Shield (which is also an affiliate of the Company s expected management team) owning at least 10% of the Company.

The transaction is also conditioned upon each of the four individuals who are expected to be the Company s executive officers entering into three-year employment and non-compete agreements with the Company. The obligation not to compete with the Company will remain in effect during the period of employment or for a one-year period if employment is terminated before expiration of the employment agreement.

In addition, the transaction is subject to approval by eMerge stockholders, receipt of all required regulatory approvals and other customary closing conditions.

The current directors of eMerge will resign as of the closing date of the Merger. The current executive officers of eMerge will resign as executive officers, but will continue to be employed as officers of the combined Company. At closing, David C. Warren, the current President and Chief Executive Officer of eMerge, and Robert E. Drury, the current Executive Vice President of Business Development of eMerge, will enter into six-month employment and non-compete agreements with the Company. Also at closing, Susan D. Mermer, currently Executive Vice President and Chief Financial Officer of eMerge, and Mark Fox, currently Executive Vice President of Technology for eMerge, will enter into one-year employment and non-compete agreements with the Company.

Either party may terminate the Merger Agreement under certain circumstances, including (i) by mutual written consent prior to closing, (ii) if the Merger has not been consummated on or before April 1, 2007, (iii) if the transaction does not receive regulatory approval or (iv) if eMerge stockholders fail to approve the Merger. PRIME may terminate the Merger Agreement if eMerge materially breaches a provision of the Merger Agreement or the Board of Directors of eMerge, in certain situations, withdraws its recommendation that the eMerge stockholders approve the Merger Agreement, eMerge may terminate the Merger Agreement if (i) PRIME materially breaches a provision of the Merger Agreement, (ii) eMerge receives an offer with respect to any merger, acquisition, consolidation or business combination involving 10% or more of eMerge s net revenues, net income, assets or voting securities that the Board of Directors of eMerge determines is more favorable from a financial point of view to the stockholders of eMerge than the terms set forth in the Merger Agreement (a Superior Proposal), (iii) it does not receive term sheets for the purchase of \$70,000,000 of securities of the Company by New Investors that are reasonably acceptable to eMerge by November 15, 2006 or (iv) it does not receive definitive commitments for the purchase of \$70,000,000 of securities of the Company by New Investors that are reasonably acceptable to eMerge by December 15, 2006 (or if the definitive commitments cease to be enforceable at any time after December 15, 2006). If (a) eMerge terminates the Merger Agreement so that it can pursue a Superior Proposal or (b) there is a successful tender offer or proxy solicitation for at least fifty percent of eMerge common stock and eMerge s shareholders do not vote to approve the Merger, eMerge will be obligated to pay a breakup fee to PRIME equal to five percent of the quotient of (i) the average closing price of eMerge stock during the ten day trading period immediately preceding the first public announcement of either the Superior Proposal, the tender offer or proxy solicitation multiplied by (ii) the number of shares of eMerge common stock outstanding as of such date.

Bridge Loan

Concurrently with the execution of the Merger Agreement, on October 16, 2006, eMerge executed a \$1.5 million revolving loan promissory note and security agreement in favor of The Biegert Family Irrevocable Trust, Dated June 11, 1998 (the <u>Bridge Loan</u>). The Bridge Loan permits eMerge to borrow up to \$1.5 million, which may be repaid and re-borrowed at any time until the earlier of (i) the termination or closing of the Merger Agreement or (ii) April 1, 2007. The Merger Agreement contains a covenant restricting eMerge from borrowing under the Bridge Loan until after December 1, 2006. The Bridge Loan is secured by all of eMerge s assets used in its Animal Information Solutions, or CattleLog, business segment. The Biegert Family Irrevocable Trust, Dated June 11, 1998, beneficially owns approximately 18% of the outstanding shares of eMerge common stock. A copy of the Bridge Loan is attached hereto as <u>Exhibit 10.1</u> and is incorporated herein by reference. The description of the Bridge Loan set forth above is qualified in its entirety by reference to <u>Exhibit 10.1</u>.

Voting and Lock-Up Agreements

In connection with the Merger Agreement, on October 16, 2006, PRIME and eMerge entered into voting and lock-up agreements with three significant eMerge stockholders (the <u>Voting and Lock-Up Agreements</u>). The stockholders that entered into the Voting and Lock-Up Agreements are Safeguard Scientifics (Delaware), Inc., Safeguard Delaware, Inc. and The Biegert Family Irrevocable Trust, Dated June 11, 1998 (the <u>Stockholder Parties</u>).

Under the Voting and Lock-Up Agreements, the Stockholder Parties agreed to vote their shares of eMerge common stock to approve the Merger Agreement, and not to sell or dispose of any of their shares of eMerge common stock from the date of the Merger Agreement until the closing date of the Merger.

Safeguard Scientifics (Delaware), Inc. beneficially owns approximately 6.9% of the outstanding shares of eMerge common stock. Safeguard Delaware, Inc. beneficially owns approximately 5.6% of the outstanding shares of eMerge common stock. The Biegert Family Irrevocable Trust, Dated June 11, 1998, beneficially owns approximately 18.0% of the outstanding shares of eMerge common stock. Copies of the Voting and Lock-Up Agreements are attached hereto as Exhibit 10.2, Exhibit 10.3 and Exhibit 10.4 and are incorporated herein by reference. The description of the Voting and Lock-Up Agreements set forth above is qualified in its entirety by reference to Exhibits 10.2, 10.3 and 10.4.

Item 2.03. Creation of a Direct Financial Obligation or an Obligation Under an Off-Balance Sheet Arrangement of the Registrant.

The information set forth in item 1.01 of this Report under the heading Bridge Loan is incorporated herein by reference.

Item 3.02 Unregistered Sale of Equity Securities.

The information set forth in Item 1.01 of this Report under the heading Merger Agreement is incorporated herein by reference. The shares of eMerge common stock to be issued to Shield, as merger consideration will be exempt from registration under the Securities Act pursuant to Section 4(2) thereof.

Important Information

eMerge plans to file with the Securities and Exchange Commission (<u>SE</u>C) and mail to its stockholders a proxy statement (the <u>Merger Proxy Statement</u>) in connection with the special meeting of eMerge stockholders that will be held to consider the proposed merger and related transactions involving eMerge, Shield, PRIME and Merger Sub and may file other documents regarding the proposed transactions with the SEC. **BEFORE MAKING ANY VOTING OR INVESTMENT DECISION, INVESTORS ARE URGED TO READ THE MERGER PROXY STATEMENT AND ANY OTHER RELEVANT DOCUMENTS CAREFULLY IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTIONS.** When available, security holders may obtain a free copy of the Merger Proxy Statement and other documents that eMerge files with the SEC at the SEC s website at www.sec.gov. The Merger Proxy Statement and these other documents may also be obtained free of charge from eMerge by directing a request to eMerge Interactive, Inc., Attention: Investor Relations, 10305 102nd Terrace, Sebastian, FL 32958.

Both (i) the shares of eMerge common stock to be issued to the sole member of PRIME in this transaction and (ii) the securities of eMerge to be issued to new investors in this transaction, will be issued without registration under the Securities Act of 1933, as amended, or state securities laws pursuant to an available exemption therefrom. Accordingly such securities may not be offered or resold in the United States absent registration with the SEC or pursuant to an applicable exemption from the registration requirements. This report is neither an offer to sell nor a solicitation of an offer to purchase securities. Neither the SEC nor any state securities commission has approved or disapproved of the securities described in this presentation or passed upon the accuracy or adequacy of the information contained in this presentation, or endorsed the merits of the presentation.

Certain Information Regarding Participants

eMerge, its directors and named executive officers may be deemed to be participants in the solicitation of eMerge s security holders in connection with the special meeting of eMerge stockholders that will be held to consider the proposed merger and related transactions. Security holders may obtain information regarding the names, affiliations and interests of such individuals in eMerge s annual report on Form 10-K for the year ended December 31, 2005, and its proxy statement dated April 21, 2006, each of which is filed with the SEC. Additional information regarding such individuals will be included in the Merger Proxy Statement. To the extent holdings of eMerge s securities have changed since the amounts printed in the proxy statement dated April 21, 2006, such changes have been reflected on Forms 3, 4 and 5 filed with the SEC and will be reflected in the Merger Proxy Statement.

For additional information regarding this report or if you have investor questions, please contact Susan D. Mermer, eMerge s Chief Financial Officer, at (772) 581-9736.

Forward-Looking Statements

Certain statements in this report are forward-looking as defined by the Private Securities Litigation Reform Act of 1995. These include statements as to the benefits of the proposed merger and related transactions involving eMerge, Shield, PRIME and Merger Sub, including future financial and operating results, cost savings, enhanced revenues and the accretion/dilution to reported earnings that may be realized from the Merger as well as other statements of expectations regarding the Merger and any other statements regarding future results or expectations. Such forward-looking statements are based on facts and conditions as they exist at the time such statements are made as well as predictions as to future facts and conditions the accurate prediction of which may be difficult and involve the assessment of events beyond the control of PRIME or eMerge. The forward-looking statements are also based on various operating assumptions regarding, among other things, overhead costs and employment levels that may not be realized. Caution must be exercised in relying on forward-looking statements. Due to known and unknown risks, actual results may differ materially from expectations or projections. PRIME and eMerge do not undertake any obligation to update any forward-looking statement, whether written or oral, relating to matters discussed in this report.

The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements: the businesses of PRIME and eMerge may not be integrated successfully or such integration may be difficult, time-consuming or more costly than expected; revenues following the Merger may be lower than expected; customer and employee relationships and business operations may be disrupted by the Merger; the ability to obtain required governmental and stockholder approvals of the Merger, and the ability to complete the Merger on the expected timeframe; changes in or elimination of laws, tariffs, trade or other controls or enforcement practices (such as: national, state or local energy policies; Federal ethanol tax incentives; regulation currently under consideration pursuant to the passage of the Energy Policy Act of 2005, which contains a renewable fuel standard and other legislation mandating the usage of ethanol or other oxygenate additives; state and federal regulations restricting or banning the use of Methyl Tertiary Butyl Ether; and environmental laws and regulations and the enforcement thereof); changes in weather and general economic conditions; overcapacity within the ethanol and petroleum refining industries; total United States consumption of gasoline; availability and costs of products, raw materials and supplies, particularly corn, coal and natural gas; labor relations; fluctuations in petroleum prices; failure to comply with applicable laws and regulations; ability to generate free cash flow to invest in the business and service indebtedness and preferred stock preferences; limitations and restrictions contained in instruments and agreements governing indebtedness and preferred stock; ability to raise additional capital and secure additional financing; ability to retain key employees; liability resulting from actual or potential future litigation; plant shutdowns or disruptions at proposed

plants; the rate of adoption of products and services; ability to grow revenue and margins; ability to implement business and expansion strategies; competition and the impact of competition on pricing; general economic conditions; availability and prices of livestock; livestock costs; product pricing; operating efficiencies; the cost of compliance with environmental and health standards; and actions of domestic and foreign governments.

These and other factors that could cause actual results to differ materially from those described in the forward-looking statements are set forth from time to time in eMerge spublic filings with the SEC and public statements by PRIME and eMerge. Viewers of this report are cautioned to consider these risks and uncertainties and not to place undue reliance on the forward-looking statements.

Item 9.01. Financial Statements and Exhibits.

- (d) Exhibits.
 - 2.1 Agreement and Plan of Merger, dated as of October 16, 2006, by and between eMerge Interactive, Inc., eMerge Merger Sub, LLC, PRIME BioSolutions, LLC and Prime BioShield, L.L.C.
 - 10.1 Revolving Loan Agreement, Promissory Note and Security Agreement, dated as of October 16, 2006, by and between eMerge Interactive, Inc. and The Biegert Family Irrevocable Trust, Dated June 11, 1998.
 - 10.2 Voting and Lock-Up Agreement, dated as of October 16, 2006, by and between PRIME BioSolutions, LLC, eMerge Interactive, Inc. and Safeguard Scientifics (Delaware), Inc.
 - 10.3 Voting and Lock-Up Agreement, dated as of October 16, 2006, by and between PRIME BioSolutions, LLC, eMerge Interactive, Inc. and Safeguard Delaware, Inc.
 - 10.4 Voting and Lock-Up Agreement, dated as of October 16 2006, by and between PRIME BioSolutions, LLC, eMerge Interactive, Inc. and The Biegert Family Irrevocable Trust, Dated June 11, 1998.
 - 99.1 Joint press release, issued by eMerge Interactive, Inc. and Prime BioShield, L.L.C. on October 16, 2006, announcing the execution of the Agreement and Plan of Merger, dated October 16, 2006, by and among eMerge Interactive, Inc., eMerge Merger Sub, LLC, Prime BioShield, L.L.C. and PRIME BioSolutions, LLC (incorporated herein by reference to <u>Exhibit 99.1</u> attached to eMerge Interactive, Inc. s Current Report on Form 8-K dated October 16, 2006).

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, hereunto duly authorized.

Dated: October 20, 2006

eMerge Interactive, Inc.

By: /s/ Susan D. Mermer
Susan D. Mermer
Executive Vice President and Chief
Financial Officer

EXHIBIT INDEX

Exhibit No.: 2.1	Description: Agreement and Plan of Merger, dated as of October 16, 2006, by and between eMerge Interactive, Inc., eMerge Merger Sub, LLC, PRIME BioSolutions, LLC and Prime BioShield, L.L.C.
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