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: August 19, 2013 Date of earliest event reported: August 16, 2013

MRC GLOBAL INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-35479 (Commission File Number) 20-5956993 (I.R.S. Employer Identification Number)

2 Houston Center, 909 Fannin, Suite 3100, Houston, TX 77010 (Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (877) 294-7574

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 (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ 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 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

Pursuant to a Current Report on Form 8-K filed on August 9, 2013, MRC Global Inc. (the "Company") reported that James F. Underhill, the Company's Executive Vice President & Chief Operating Officer—U.S. Operations, has agreed to retire from the Company.

The Company and Mr. Underhill are parties to a Second Amended and Restated Employment Agreement dated as of December 5, 2011 (the "Employment Agreement"). Pursuant to the Employment Agreement, the Company is separating Mr. Underhill from service without Cause (as defined in the Employment Agreement) effective August 31, 2013 due to the elimination of Mr. Underhill's position of Chief Operating Officer – U.S. Operations and the consolidation of that position with the position of Executive Vice President- Business Development. Subject to Mr. Underhill's execution of a release of the Company of certain liabilities and the continued compliance with certain covenants, the Employment Agreement provides Mr. Underhill certain post termination benefits. These benefits include the following:

- separation payments equal to Mr. Underhill's base salary of \$500,000, paid in 12 monthly installments,
- an annual incentive bonus for 2013 based on actual Company performance, prorated for the number of days Mr. Underhill was actively employed in 2013, paid in early 2014 at the same time as other executives of the Company after the review of 2013 results,
- the continuation of medical, dental and vision benefits for 12 months, and
- payment for accrued but unused vacation days.

To receive these benefits, under the Employment Agreement, Mr. Underhill is required to comply with the following covenants:

- Mr. Underhill must execute a release in favor of the Company.
- Mr. Underhill must maintain the confidentiality of confidential information of the Company.
- Mr. Underhill may not compete against the Company for 12 months.
- Mr. Underhill may not solicit business from the Company's customers or the employment of the Company's employees for 12 months, or otherwise interfere Company business relationships.
 - 2

- Mr. Underhill may not interfere with the proprietary rights of the Company.
- Mr. Underhill must not make statements that disparage the Company.
- Mr. Underhill must cooperate with the Company with respect to matters that occurred while he was employed by the Company and provide the Company with consulting services regarding IT matters and U.S. operations as the Company requests.

As a result of his thirty-three years of service to the Company, Mr. Underhill will be considered "retired" for the purposes of his outstanding, unvested awards of 135,594 options and 5,324 shares of restricted stock. The options were issued at strike prices between \$18.10 and \$29.35 and vest in installments through May 2017; and the restricted stock awards vest in installments through March 2018. During the remaining vesting period of each award, so long as Mr. Underhill does not compete with the Company or solicit business from the Company's customers or the employment of the Company's employees, these awards will continue to be governed by the applicable award agreement and equity award plan, except that each option will continue to vest in accordance with the original vesting schedule.

Mr. Underhill is a participant in the McJunkin Red Man Corporation Nonqualified Deferred Compensation Plan (the "NQD Plan"). As a result of his departure, a "Separation of Service" will have occurred under the NQD Plan, and Mr. Underhill will receive the benefits to which he is entitled under the NQD Plan in accordance with its terms.

The Company has entered into a Separation Agreement and Complete Release dated August 16, 2013 with Mr. Underhill to give effect to the foregoing.

The Company also entered into a Consulting Agreement (the "Consulting Agreement") with Mr. Underhill pursuant to which Mr. Underhill will perform certain consulting services for the Company pertaining to the Company's IT systems and U.S. operations and Mr. Underhill's duties for the Company prior to his separation. The Consulting Agreement commences September 1, 2014 and ends on March 31, 2015. For the services to be rendered under the Separation Agreement, Mr. Underhill will be entitled to a consulting fee of \$250,000, payable in six equal monthly installments, subject to further compliance with certain covenants pertaining to confidentiality, non-competition, non-solicitation of Company employees and non-interference with Company business relationships, and protection of proprietary rights of the Company. Pursuant to the Consulting Agreement, Mr. Underhill's covenants not to compete with the Company or solicit the business of the Company's customers or the employment of the Company's employees have been extended an additional six months beyond the period required under the Employment Agreement.

3

SIGNATURES

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.

Date: August 19, 2013

MRC GLOBAL INC.

By: /s/ Daniel J. Churay

Daniel J. Churay Executive Vice President- Corporate Affairs, General Counsel and Corporate Secretary

4