U.S. SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-Q/A AMENDMENT NO. 1

(Mark One)

(X) QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.

For the quarterly period ended August 31, 2010

OR

() TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.

For the transition period from _____ to _____.

Commission File Number 0-12305

REPRO-MED SYSTEMS, INC. (Exact name of registrant as specified in its charter)

New York13-3044880(State or other jurisdiction of
incorporation or organization)(IRS Employer Identification No.)

24 Carpenter Road, Chester New York10918(Address of principal executive offices)(Zip Code)

Registrant's telephone number, including area code: (845) 469-2042

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. [X] Yes [] No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files.) Yes [] No []

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer []	Accelerated filer []
Non-accelerated filer []	Smaller reporting company [X]
(Do not check if a smaller reporting company)	

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). [] Yes [X] No

As of August 31, 2010, 36,536,667 shares of common stock, \$.01 par value per share, were outstanding.

EXPLANATORY NOTE

Repro-Med Systems, Inc. (the "Company") is filing this Amendment No. 1 on Form 10-Q/A ("Amendment No. 1") to amend Part II, Item 6 of its Quarterly Report on Form 10-Q for the quarterly period ended August 31, 2010, originally filed with the Securities and Exchange Commission on October 15, 2010 (the "Original Quarterly Report"). Repro-Med Systems, Inc. is filing this Amendment No. 1 for the sole purpose of amending the wording of Exhibit 31.1 of the Original

Quarterly Report, which did not exactly match the wording required by Item 601(b)(31).

Except as described above, this Amendment No. 1 does not modify or update the disclosures presented in, or exhibits to, the Original Quarterly Report in any way. Those sections of the Original Quarterly Report that are unaffected by this Amendment No. 1 are not included herein. This Amendment No. 1 continues to speak as of the date of the Original Quarterly Report. Furthermore, this Amendment does not reflect events occurring after the filing of the Original Quarterly report. Accordingly, this Amendment should be read in conjunction with the Original Quarterly Report, as well as the Company's other filings made with the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act subsequent to the filing of the Original Quarterly Report.

PART II - OTHER INFORMATION

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

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(a) EXHIBITS

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- 31.1 Certification of Chief Executive Officer and Principal Financial Officer Pursuant to Section 302 of Sarbanes-Oxley Act 2002
- 32.1 Certification of Chief Executive Officer and Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act 2002 *

* previously filed

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SIGNATURES

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Pursuant to the requirements of Section 13 or 15 (d) 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.

REPRO-MED SYSTEMS, INC.

/s/ Andrew I. Sealfon March 1, 2011

Andrew I. Sealfon, President, Treasurer, Chairman of the Board, Director, Chief Executive Officer and Principal Financial Officer

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EXHIBIT 31.1

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACTS OF 2002

I, Andrew I. Sealfon, certify that:

1) I have reviewed the Form 10-Q of Repro-Med Systems, Inc. (the "Report");

- 2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4) The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5) The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2011

/s/ Andrew I. Sealfon Andrew I. Sealfon Chief Executive Officer and Principal Financial Officer