Section: Rule: **Public** 7-16~2012 Availability:_

July 16, 2012

Response of the Office of Chief Counsel **Division of Corporation Finance**

JUI 162012

Re: GlenRose Instruments Inc.

Incoming letter dated July 3, 2012

Washington, DC 20549

Based on the facts presented, the Division will not object if GlenRose stops filing periodic and current reports under the Securities Exchange Act of 1934, including its quarterly report on Form 10-Q for the quarter ended June 24, 2012. In reaching this position, we note that GlenRose has filed a post-effective amendment removing from registration unsold securities under its effective registration statement on Form S-8, and that post-effective amendment is effective. We assume that, consistent with the representations made in your letter, GlenRose will file a certification on Form 15 making appropriate claims under Exchange Act Rules 12g-4 and 12h-3 on or before the due date of its Form 10-Q for the quarter period ended June 24, 2012.

This position is based on the representations made to the Division in your letter. Any different facts or conditions might require the Division to reach a different conclusion. Further, this response expresses the Division's position on enforcement action only and does not express any legal conclusion on the question presented.

Sincerely,

Carmen Moncada-Terry Special Counsel



UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

July 16, 2012

Mail Stop 4561

Edwin L. Miller, Jr. Sullivan & Worcester LLP One Post Office Square Boston, MA 02109

Re: GlenRose Instruments Inc.

Dear Mr. Miller:

In regard to your letter of July 3, 2012, our response thereto is attached to the enclosed photocopy of your correspondence. By doing this, we avoid having to recite or summarize the facts set forth in your letter.

Sincerely,

Thomas J. Kim

Chief Counsel & Associate Director

Edwin L. Miller, Jr. (617) 338-2447 Direct (617) 338-2880 Fax emiller@sandw.com

July 3, 2012

Securities Exchange Act of 1934, Section 12(g); Rule 12g-4 Securities Exchange Act of 1934, Section 12(h); Rule 12h-3 Securities Exchange Act of 1934, Section 13(a) Securities Exchange Act of 1934, Section 15(d)

VIA ONLINE

Securities and Exchange Commission Division of Corporation Finance Office of Chief Counsel 100 F Street, N.E. Washington, D.C. 20549

Re: GlenRose Instruments Inc. (Commission File No. 000-51645)

Ladies and Gentlemen:

We are writing on behalf of GlenRose Instruments Inc. (the "Company"), a smaller reporting company, to request that a letter be issued advising the Company that the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") concurs with the Company's view that the updating pursuant to Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act"), of the Company's registration statement on Form S-8 (File No. 333-146956) during the Company's 2012 fiscal year would not preclude the Company from utilizing Rule 12h-3(a) and (b)(1)(i) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), to suspend the Company's duty to file with the Commission the reports required by Sections 13(a) and 15(d) of the Exchange Act and the rules and regulations promulgated thereunder with respect to the Company's common stock, par value \$0.01 per share (the "Common Stock"). We also ask that the Staff confirm that it will not recommend enforcement action by the Commission if the Company files a Form 15 pursuant to Rule 12g-4 and Rule 12h-3 under the Exchange Act on or before the due date for the Company's next periodic report, a quarterly report on Form 10-Q for the quarter ending June 24, 2012, to (a) terminate the registration of the Common Stock under Section 12(g) of the Exchange Act and (b) suspend the Company's reporting obligations under Sections 13(a) and 15(d) of the Exchange Act, with the result that the Company would not file a quarterly report on Form 10-O for the quarter ending June 24, 2012.

As described herein, the Company has 25 stockholders of record, and its shares are neither listed on an exchange nor quoted on an automated quotation system. The Company seeks to terminate its Exchange Act registration and suspend its Exchange Act reporting obligations.

Except as otherwise set forth herein, the information set forth in this letter regarding the Company is as provided to us by the Company. The Company has authorized us to make the statements set forth in this letter on its behalf. The Company will file with the Commission all required periodic and current reports until the date the Company files with the Commission a Form 15 to terminate the registration of the Common Stock under Section 12(g) of the Exchange Act and suspend the Company's reporting obligations under Sections 13(a) and 15(d) of the Exchange Act.

Background

The Company provides radiological services; operates a radiochemistry laboratory network; and provides radiological characterization and analysis; provides hazardous, radioactive and mixed waste management; and provides facility, environmental, safety, and industrial hygiene health management. The Company has filed all of its periodic and current reports for its three most recent fiscal years (2009, 2010 and 2011) and for its current fiscal year (2012) through the date of this letter. The Company's fiscal year for the 2011 fiscal year ended on December 25, 2011 and for the 2012 fiscal year will end on December 30, 2012.

There is no active trading market for the Common Stock. The Common Stock is neither listed on a national securities exchange nor quoted on an automated quotation system. According to the Company's books and records, as of December 25, 2011 and as of July 3, 2012, the Company had 3,112,647 shares of Common Stock outstanding held by 25 record holders, including 10,000 shares of Restricted Stock (defined below). In addition to the Common Stock, the Company had outstanding options ("Options") to purchase 168,000 and 167,000 shares of Common Stock as of December 25, 2011 and July 3, 2012, respectively. The reduction of 1,000 outstanding options to purchase Common Stock between the two periods was the result of the termination of an employee and his decision to not exercise those options. As of the date of this letter, the only outstanding securities of the Company are the 3,112,647 shares of Common Stock and 167,000 Options.

The Common Stock is registered under Section 12(g) of the Exchange Act and constitutes the only class of the Company's securities that is registered under Section 12 of the Exchange Act. The Company has not issued (a) any other class of securities that is registered or required to be registered under Section 12 of the Exchange Act or (b) any other class of securities, including any class of debt security, subject to the requirements of Section 15(d) of the Exchange Act.

The Options are described in more detail below. The Company does not have any outstanding securities currently exercisable for or convertible into Common Stock other than the Options.

As of the date of this letter, the Company has no outstanding debt securities and has no contractual obligations that would require the Company to continue to file reports pursuant to Section 13(a) or 15(d) of the Exchange Act.

Subject to the receipt of the no-action relief sought in this letter, but before the due date of its Form 10-Q for the quarter ending June 24, 2012, which is August 8, 2012, the Company intends to file a Form 15 with the Commission to (a) deregister the Common Stock under Section 12(g) of the Exchange Act and (b) suspend its duty to file reports under Sections 13(a) and 15(d) of the Exchange Act.

The Company acknowledges that, if on the first day of any subsequent fiscal year there are (a) 300 or more holders of record of Common Stock, or (b) 500 or more holders of record of Common Stock and the Company's total assets have exceeded \$10 million on the last day of any of the Company's three most recent fiscal years, the suspension of reporting obligations under Section 15(d) of the Exchange Act will lapse, and the Company will be required to resume periodic reporting under Section 15(d) of the Exchange Act, as provided in Rule 12h-3 under the Exchange Act.

Registration Statements

The Company has on file with the Commission the following registration statement on Form S-8 under the Securities Act (the "Registration Statement"):

• Form S-8 (File No. 333-146956, filed and effective October 26, 2007): This registration statement registered the offer and sale of 700,000 shares of Common Stock pursuant to the 2005 Stock Option and Incentive Plan (the "Plan").

The Registration Statement on Form S-8 (File No. 333-146956) identified above became effective during the Company's 2007 fiscal year and was automatically updated during the Company's 2008, 2009, 2010, 2011 and 2012 fiscal years under Section 10(a)(3) of the Securities Act in connection with the filing of the Company's Annual Reports on Form 10-K for its fiscal years ended 2007 through 2011. During the Company's 2010, 2011 and current 2012 fiscal years no sales were made under the Registration Statement. As of the date of this letter, no sales have ever been made under the Registration Statement.

The Company does not have any other registration statements on file that became effective or were automatically updated under Section 10(a)(3) of the Securities Act during the Company's 2010 or 2011 fiscal years through the date of this letter.

Discussion

Rule 12g-4(a) under the Exchange Act provides that an issuer is entitled to terminate its registration of a class of securities under Section 12(g) of the Exchange Act if the issuer certifies to the Commission that such class of securities is (a) held of record by less than 300 persons or (b) held of record by less than 500 persons, where the total assets of the issuer have not exceeded \$10 million on the last day of each of the issuer's most recent three fiscal years. The issuer's duty to file any reports required under Section 13(a) is suspended immediately upon the filing of the necessary certification on Form 15. Since the Company satisfies the requirements of Rule 12g-4(a) through the date of this letter, the Company is eligible to deregister the Common Stock under Section 12(g) of the Exchange Act.

Rule 12h-3(a) under the Exchange Act provides that, subject to the provisions of

paragraphs (c) and (d) of the rule, an issuer's duty under Section 15(d) of the Exchange Act to file reports required by Section 13(a) of the Exchange Act with respect to a class of securities specified in Rule 12h-3(b) shall be suspended immediately upon the filing of a Form 15 if the issuer has filed all reports required by Section 13(a), without regard to Rule 12b-25 under the Exchange Act, for the shorter of its most recent three fiscal years and the portion of the current year preceding the date of the filing, or the period since the issuer became subject to such reporting obligation. The Company has filed all required reports under Section 13(a) of the Exchange Act for the period specified in Rule 12h-3(a), and, since the Company became a reporting Company under the Exchange Act through the date of this letter, the Common Stock has met the criteria set forth in Rule 12h-3(b)(1)(i) in that the Common Stock is held of record by less than 300 persons.

Rule 12h-3(c) under the Exchange Act provides, however, that the suspension of an issuer's duty to file reports under Section 13(a) is not available to any class of securities for a fiscal year in which a registration statement relating to that class becomes effective under the Securities Act or is required to be updated pursuant to Section 10(a)(3) of the Securities Act. As stated above, while the Company's Registration Statement on Form S-8 became effective during the Company's 2007 fiscal year, it was automatically updated during the Company's 2012 fiscal year under Section 10(a)(3) of the Securities Act in connection with the filing of the Company's Annual Reports on Form 10-K for its fiscal year ended December 25, 2011. Accordingly, a literal interpretation of Rule 12h-3(c) would prevent the Company from suspending its duty under Section 15(d) to file reports required by Section 13(a), despite satisfying Rule 12h-3(a) and (b), because the Company's Registration Statement on Form S-8 was updated by reference under Section 10(a)(3) upon the filing of the Company's Annual Report on Form 10-K during the Company's 2012 fiscal year.

The purpose of Rule 12h-3 is to permit a company to suspend its reporting obligations when its securities are held by a small number of persons. The Staff has repeatedly indicated that a literal reading of Rule 12h-3(c) is not always justified by public policy reasons. In the proposing release to revise Rule 12h-3(c), the Commission stated that the purpose of periodic reporting under Section 15(d) is "to assure a stream of current information about an issuer for the benefit of purchasers in the registered offering, and for the public, in situations where Section 13 of the Exchange Act would not otherwise apply" and that "this [Rule 12h-3(c)] limitation is in keeping with the philosophy reflected in Section 15(d) of the Exchange Act that generally the investing public should have available complete information about the issuer's activities at least through the end of the year in which it makes a registered offering." Exchange Act Release No. 34-20263 (October 5, 1983) (the "Proposing Release"). See also DT Sale Corporation (available November 14, 2011); Aeroflex Incorporated (available August 4, 2011); Constar International Inc. (available March 29, 2011); CPG International Inc. (available March 23, 2011); enherent Corporation (available March 17, 2011); Mexican Restaurants, Inc. (available January 13, 2011); Intraop Medical Corporation (available May 12, 2010); GrandSouth Bancorporation (available March 24, 2010); Harrington West Financial Group Inc. (available March 24, 2010); PureDepth, Inc. (available March 8, 2010); Craftmade International, Inc. (available January 27, 2010); DATATRAK International, Inc. (available August 12, 2009); Neuro-Hitech, Inc. (available July 30, 2009); Interlink Electronics, Inc. (available March 26, 2009); Metro One Telecommunications, Inc. (available March 4, 2009); I.C. Isaacs & Company, Inc. (available August 13, 2008); Questar Assessment, Inc. (available

June 13, 2008).

The Company submits that if the purpose of Rule 12h-3(c) is to give the investing public complete information about the issuer's activities through the end of the year in which the issuer makes an offering, then requiring the Company to continue to report now would not further that purpose because no one has purchased shares under the Registration Statement.

On May 22, 2012, the Company filed with the Commission a post-effective amendment to the Company's Registration Statement on Form S-8 to deregister all Common Stock that remained unsold thereunder. This post-effective amendment to the Registration Statement on Form S-8 became effective immediately upon filing. Accordingly, investors are no longer able to purchase securities pursuant to that registration statement and the protection of Section 15(d) is no longer necessary for potential purchasers.

The Staff has concurred in allowing issuers to file a Form 15 notwithstanding that such issuers had effective registration statements that had been automatically updated during the current fiscal year. See e.g., enherent Corporation (available March 17, 2011); Mexican Restaurants, Inc. (available January 13, 2011); Intraop Medical Corporation (available May 12, 2010); GrandSouth Bancorporation (available March 24, 2010); Craftmade International, Inc. (available January 27, 2010); Neuro-Hitech, Inc. (available July 30, 2009); I.C. Isaacs & Company, Inc. (available August 13, 2008).

In the Proposing Release, the Commission acknowledged that Congress recognized, with respect to Section 15(d) of the Exchange Act, that the benefits of periodic reporting by an issuer may not always be commensurate with the financial and administrative burdens imposed, particularly where smaller companies with a small number of public stockholders are involved. See e.g., DT Sale Corporation (available November 14, 2011); Decorator Industries, Inc. (available March 23, 2011); enherent Corporation (available March 17, 2011); Mexican Restaurants, Inc. (available January 13, 2011); Intraop Medical Corporation (available May 12, 2010); Harrington West Financial Group Inc. (available March 24, 2010); PureDepth, Inc. (available March 8, 2010); Craftmade International, Inc. (available January 27, 2010); Silverstar Holdings, Ltd. (available May 15, 2009); Interlink Electronics, Inc. (available March 26, 2009); Questar Assessment, Inc. (available June 13, 2008); Planet Technologies, Inc. (available February 7, 2008).

The preparation of periodic and current reports required by the Commission imposes a financial burden on the Company and involves significant management efforts. The Company estimates that it spends approximately \$300,000 per year in complying with reporting obligations (excluding internal costs allocated to compliance with reporting obligations). Such burdens and efforts are disproportionate to the number of record holders and value of the Company, and disproportionate to the benefits to be derived given that there is no active trading market for the Common Stock. Based on public filings, more than 34.5% of the outstanding Common Stock is beneficially owned by executive officers, directors, and affiliates of the Company. In addition, the Common Stock has historically seen low turnover, and there is no active trading market. As stated above, the Company's number of record stockholders is 25, significantly less than the 300 persons specified by Rule 12h-3(b)(1)(i).

As of the date of this letter, the Company had outstanding Options to purchase 167,000 shares of Common Stock. The Options were issued on November 13, 2007, and expire on November 13, 2014. They vest over a five-year period at 20% per year and are currently held by 3 current officers and 23 employees of the Company. The exercise price of the Options is \$7.00. The Company estimates that the current fair market value of its Common Stock is approximately between \$3.00-\$4.00; therefore, the Options are currently out-of the money. The Company has not issued any Options since November 13, 2007.

On November 13, 2007, the Company made grants of 15,000 shares of Common Stock, subject to stock restriction agreements ("Restricted Stock"), which among other things, subjects the shares to a Company repurchase option, to each of three of its directors. Those shares begin to vest, in other words the repurchase option lapses, 90 days after the Company's initial listing on a securities exchange or an over-the-counter bulletin board at a rate of 25% per year, and all of the shares become vested shares upon a change in control prior to a termination event. As of the date of this letter, there were 10,000 unvested shares of Restricted Stock outstanding.

In enherent Corporation (available March 17, 2011), Intraop Medical Corporation (available May 12, 2010) and Metro One Telecommunications, Inc. (available March 4, 2009), the Staff concurred in allowing the issuer to file a Form 15 notwithstanding that at such time former employees of the issuer held options to acquire common stock of the issuer. See also Planet Technologies, Inc. (available February 7, 2008). Furthermore, notwithstanding the termination of the Company's Registration Statement on Form S-8, the holders of Options will not be disadvantaged by the absence of periodic reports under the Exchange Act because such holders have access to information about the Company and the ability to ask questions of executive officers prior to making a decision to exercise any Options.

It is the Company's view that the benefit to those few persons holding Options granted under the Plan is outweighed by the excessive cost to the Company of continuing to file reports. In this instance, there is very little benefit to the investing public to be had by requiring the Company to make filings under the Exchange Act. Conversely, the Company would undoubtedly incur substantial time and expense in preparing the required filings. The policy rationale underlying Rule 12h-3(c) is not applicable to the Company's Registration Statement on Form S-8. The Company has complied with its reporting obligations under the Exchange Act and, in doing so, has complied with its undertakings to keep its effective registration statement current. We note that the Staff has granted no-action relief in a range of circumstances where the literal application of Rule 12h-3(c) would yield relatively little public benefit in light of the burdens on the issuer of compliance with reporting requirements under the Exchange Act. See e.g., DT Sale Corporation (available November 14, 2011); enherent Corporation (available March 17, 2011); Intraop Medical Corporation (available May 12, 2010); GrandSouth Bancorporation (available March 24, 2010); Harrington West Financial Group Inc. (available March 24, 2010); Craftmade International, Inc. (available January 27, 2010); Neuro-Hitech, Inc. (available July 30, 2009); Interlink Electronics, Inc. (available March 26, 2009); I.C. Isaacs & Company, Inc. (available August 13, 2008); Questar Assessment, Inc. (available June 13, 2008); Planet Technologies, Inc. (available February 7, 2008).

In the Company's circumstances, the costs associated with reporting are unnecessary and excessively burdensome, particularly in light of the limited benefits the Company's

stockholders and the investing public are likely to receive through continued registration and reporting. Once the Company terminates its reporting status, Rule 701 under the Securities Act will permit the Company to offer and sell securities pursuant to the Plan in compliance with Rule 701. See NewCity Communications, Inc. (available October 6, 1988). The Company has informed us that after the filing of the Form 15, the Company intends to comply with all requirements applicable to it to ensure that the issuance of securities pursuant to the Plan to the above-described Option holders will be in accordance with Rule 701. Rule 701 exempts from the registration requirements of the Securities Act certain offers and sales of securities made under the terms of compensatory benefit plans and written compensation arrangements by an issuer not subject to the reporting requirements of the Exchange Act. The Plan satisfies the eligibility requirements of Rule 701, and upon the effectiveness of the Form 15 certification, the Company will become eligible as an issuer to utilize the exemption under Rule 701. The Company intends to continue to rely on other exemptions (e.g., Section 4(a)(2)) with respect to the non-plan Options. Securities issued under Rule 701 or Section 4(a)(2) will be restricted securities as defined in Rule 144 under the Securities Act and may only be resold pursuant to an effective registration statement under the Securities Act or pursuant to an exemption from registration under the Securities Act. See e.g., Beverly Hills Bancorp Inc. (available March 13, 2009); Metro One Telecommunications, Inc. (available March 4, 2009); Planet Technologies, Inc. (available February 7, 2008).

Conclusion

cc:

Under the circumstances described in this letter and for the reasons discussed above, we respectfully request that the Staff confirm that it concurs with the Company's view that the updating of the Company's Registration Statement on Form S-8 pursuant to Section 10(a)(3) of the Securities Act during the Company's 2012 fiscal year will not preclude the Company from utilizing Rule 12h-3 under the Exchange Act to suspend the Company's duty to file with the Commission reports required by Sections 13(a) and 15(d) of the Exchange Act and the rules and regulations thereunder with respect to the Common Stock, including the Company's duty to file its next periodic report, a quarterly report on Form 10-Q for the quarter ending June 24, 2012. If the Staff grants the relief sought by this letter, the Company intends to file a single Form 15 requesting simultaneously (a) the termination of the registration of the Common Stock under Section 12(g) of the Exchange Act and (b) the suspension of its obligations to file periodic and current reports under Sections 13(a) and 15(d) of the Exchange Act.

Should the Staff disagree with any of the views discussed in this letter, we would appreciate an opportunity to discuss the matter with the Staff before it issues a written response to this letter. You may call me at (617) 338-2447 or email me at emiller@sandw.com with any questions or comments.

Very truly yours,

Mulmulm

Edwin L. Miller Jr.

Anthony Loumidis, GlenRose Instruments Inc.