

August 14, 2006

Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549
Attention: Brian R. Cascio

Re: Digirad Corporation (the “**Company**”)
Form 10-K for the fiscal year ended December 31, 2005
Form 10-Q for the fiscal quarter ended March 31, 2006
File No. 0-50789

Dear Mr. Cascio:

On behalf of Digirad Corporation, this letter responds to the comments of the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) to the filing of the above-referenced Form 10-K for the fiscal year ended December 31, 2005 (the “**Form 10-K**”) and Form 10-Q for the fiscal quarter ended March 31, 2006 (the “**Form 10-Q**”), which were furnished by your letter dated July 21, 2006 (the “**Staff Letter**”), as well as the Staff’s verbal comments to our response to the Staff Letter filed on August 3, 2006. In response to the Staff’s comments, we have reproduced below the comments set forth in the Staff Letter, followed each comment with our response, and supplemented our initial response with the written undertakings by the Company requested by the Staff. The numbered paragraphs of this letter set forth below correspond to the numbered paragraphs of the Staff Letter. References to “we,” “our” or “us” mean the Company or its advisors, as the context may require.

Our responses to the comments set forth in the Staff Letter are as follows:

Staff Comments

1. In future filings quantify and discuss the specific factors that contributed to the significant decrease in gross profit as a percentage of sales. Any expected trends should also be discussed.

Response: We acknowledge the Staff’s comment, and we will endeavor to include the requested information in our future filings.

2. In future filings please revise the statements of operations to remove the stock-based compensation line items from the face of your statements of operations and, instead, reflect the amounts in the appropriate captions of the statements. As indicated in SAB Topic 14-F, you may present the related stock-based compensation expenses in a parenthetical note to the appropriate income statement line items. That guidance also indicates that you may present the information in the notes to the financial statements or within MD&A. In addition, remove the subtotal for stock based compensation on page F-4.

Response: We acknowledge the Staff's comment, and we will remove the stock-based compensation line items from the face of our statements of operations and, instead, will place a table identifying the breakdown of the stock-based compensation expenses in the notes to the financial statements in our future filings.

3. In the future filings please disclose more about the level III violation and the expected impact that this will have on your operations. In addition, clarify the correction action implemented or required to be implemented related to this matter.

Response: As to the Level III violation, we do not intend to report on it again because the violation was minor and carried no sanctions or penalties. Corrective actions related to the implementation of additional checks and safeguards in verifying the credentials and the information submitted to us by physicians who wish to become authorized users on our radioactive materials licenses. These corrective actions entail additional administrative work which impacts our business very little. We acknowledge the Staff's comment as a general matter, and we will endeavor to include more detailed information in our future filings on similar matters which may arise.

4. In future filings provide an assessment of whether the legal matters are expected to have a significant impact on your financial condition, results of operations or liquidity, or indicate why such an assessment cannot be made.

Response: We acknowledge the Staff's comment, and we will endeavor to include the requested information in our future filings.

5. We note on that you present your non-GAAP measures and reconciliation in the form of summarized statements of operations. This format may be confusing to investors as it also reflects several non-GAAP measures, including adjusted gross profit, adjusted operating expenses, adjusted loss from operations, adjusted net loss, and adjusted net loss per share, which have not been identified or described to investors. In fact, it appears that management does not use all of these non-GAAP measures but they are shown here as a result of the presentation format. Please note that instruction 2 to Item 2.02 of Form 8-K requires that when furnishing

information under this item you must provide all the disclosure required by paragraph (e)(1)(i) of Item 10 of Regulation S-K and FAQ 8 Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003 for each non-GAAP measure presented. In addition, you should explain why you believe each measure provides useful information to investors.

- To eliminate investor confusion, please remove the non-GAAP summarized statements of operations format from future filings and only disclose those non-GAAP measures used by management with the appropriate reconciliations and disclosures.
- Please note that in the event that your Form 8-K is incorporated by reference into a 33 Act registration statement, we may have additional questions relating to the appropriateness of this information being included in a document filed with, and not just furnished to, the Commission. At that time, we may request an amendment to the Form 8-K.

Response: We acknowledge the Staff's comment, and we will remove the Non-GAAP measures and reconciliation table specific to stock-based compensation expenses, and, instead, will identify the stock-based compensation expenses included in the statement of operations, excluding a subtotal, on the face of the statement of operations in future press releases and corresponding Form 8-K filings.

The written undertakings by the Company requested by the Staff are set forth in Exhibit A annexed hereto.

Your prompt attention to the Form 10-K and Form 10-Q would be greatly appreciated. Any questions or additional comments you may have may be directed to the undersigned at (858) 350-2308.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ MARTIN WATERS

Martin Waters

cc: Vera Pardee
Todd Clyde

Exhibit A

Digirad Corporation (the “***Company***”) hereby confirms that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filings;
- Staff comments or changes to disclosure in response to Staff comments in the filings reviewed by the Staff do not foreclose the Commission from taking any action with respect to the filings; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Dated: August 14, 2006

Digirad Corporation

/s/ VERA PARDEE

Vera Pardee

General Counsel