



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

February 5, 2010

Mail Stop 4631

Mr. Larry G. Stambaugh
Chief Executive Officer
Cryoport, Inc.
20382 Barents Sea Circle
Lake Forest, California 92630

**Re: Cryoport, Inc.
Amendment No. 4
To Registration Statement on Form S-1
Filed on February 2, 2010
File No.: 333-162350**

Dear Mr. Stambaugh:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information we may raise additional comments.

Prospectus Cover Page

1. Please revise your prospectus cover page to state a definitive number of units you are offering. You may provide your good faith estimate of the price per unit prior to effectiveness, which may be given as a price range. You may also increase the size of the offering after effectiveness by filing a new registration statement for an additional dollar amount of securities. This registration statement may become effective automatically when filed if it meets the requirements of Rule 462(b). You may also adjust the size of your offering after effectiveness as permitted by instruction to paragraph (a) to Rule 430A. Please also see our Securities Act Rules C&DIs at paragraphs 240.01, 640.04 and 640.05 for information about changes in the size of an offering. However, your prospectus should state a certain number of units to be offered at the time the registration statement is declared effective.

Legal Opinion

2. Please also ensure that the legal opinion filed as Exhibit 5.1 correctly states the specific number of units that are being offered, and as to which counsel is giving its opinion.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement.

Mr. Larry G. Stambaugh
Cryoport, Inc
February 5, 2010
Page 3 of 3

We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request as least two business days in advance of the requested effective date.

If you have any questions, please contact Dorine Miller, Financial Analyst, at (202) 551-3711, or the undersigned at (202) 551-3765.

Sincerely,

Pamela A. Long
Assistant Director

cc: Gregory Sichenzia, Esq.
Sichenzia Ross Friedman Ference LLP
61 Broadway
New York, New York, 10006

Mark R. Ziebell, Esq.
Snell & Wilmer
600 Anton Blvd., Suite 1400
Costa Mesa, CA 92626