

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

June 25, 2012

<u>Via E-mail</u>
Mr. Richard A. Johnson, CFO
Dynasil Corporation of America
44 Hunt Street
Watertown, MA 02472

Re: Dynasil Corporation of America

Form 10-K for the fiscal year ended September 30, 2011

Filed December 29, 2011

Form 10-Q for the quarter ended March 31, 2012

Filed May 15, 2012 File No. 1-35011

Dear Mr. Johnson:

We have reviewed your filings and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

Form 10-Q for the quarter ended March 31, 2012

Critical Accounting Policies and Estimates, page 24

Valuation of Long-lived Assets, Intangible assets and Goodwill, page 25

Goodwill, page 25

We note that your stock price has declined since your fiscal year end September 30, 2011 and also note your disclosure which indicates that if events or changes in circumstances indicate that assets may be impaired you perform additional impairment tests. With a view towards future disclosures please tell us what changes in circumstances you consider when determining whether additional impairment testing is necessary and specifically address how you considered the decline in the market value of your stock over the first six months of your fiscal 2012.

Richard A. Johnson Dynasil Corporation of America June 25, 2012 Page 2

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

You may contact Mindy Hooker at (202) 551-3732 or me at (202) 551-3768 with any questions.

Sincerely,

/s/ John Cash

John Cash Branch Chief