



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

Mail Stop 7010

April 10, 2007

Ms. Laura Lunardo  
Dynasil Corporation of America  
385 Cooper Road  
West Berlin, New Jersey 08091

**RE: Dynasil Corporation of America  
Form 10-KSB for the fiscal year ended September 30, 2006  
Filed December 13, 2006  
File #0-27503**

Dear Ms. Lunardo:

We have reviewed your response letter dated March 26, 2007 and have the following additional comments. If you disagree, we will consider your explanation as to why our comment is inapplicable. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Form 10-QSB for the Period Ended December 31, 2006

Note 2 – Business Acquisition, page 7

1. Based on your response to our prior comment three, it appears that EMF Corporation's \$1,050,000 bank financing was entered into immediately after your purchase of EMF. In this regard, we read in your response that Dynasil obtained bank financing of \$1.05 million through its new wholly-owned subsidiary EMF, and that Dynasil guaranteed this new debt. We also read that the debt was not a liability of the former EMF company and therefore was not a liability assumed in your acquisition of EMF. Based on your response, it is unclear to us why the "Cash paid for acquisition of EMF" as presented on the face of your cash flow statement excludes the \$520,000 paid to EMF's seller that was funded by the \$1.05 million commercial mortgage, and it is also unclear to us why the "Proceeds from (payments on) long-term debt" as presented on the face of your cash flow statement appears to exclude the \$1.05 million borrowing. In this regard, it appears that borrowing the \$1.05 million represents a cash transaction of the consolidated Dynasil entity, and paying \$520,000 to EMF's seller also

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represents a cash transaction of the consolidated Dynasil entity, so it is unclear to us why these transactions appear to be excluded from the consolidated Dynasil entity's statement of cash flows. Please explain this matter to us in more detail. Alternatively, you may confirm to us that you will revise your cash flow statement in future periodic filings to include the \$1.05 million borrowing and the \$520,000 payment to EMF's seller as indicated above, along with revising to separately present proceeds from long-term debt and repayment of long-term debt as required by paragraph 13 of SFAS 95.

Item 3 Controls and Procedures, page 13

2. We have reviewed your response to our prior comment four, including your proposed disclosure for future filings. We note your statement that disclosure controls and procedures are designed to ensure that information required to be disclosed in your filings under the Exchange Act is recorded, processed, summarized and reported within the specified time period. Disclosure controls and procedures are also meant to ensure that material information required to be in your reports is made known to management and others, as appropriate, to allow timely decisions regarding required disclosures. If you chose to define disclosure controls and procedures in future filings, please ensure that you include the complete definition. Alternatively, you may omit the definition. See Exchange Act Rule 13a-15(e).

\* \* \* \*

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

If you have any questions regarding these comments, please direct them to Tricia Armelin, Staff Accountant, at (202) 551-3747, Jennifer Thompson, Senior Accountant, at (202) 551-3737 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash  
Accounting Branch Chief