



DIVISION OF  
CORPORATION FINANCE

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

January 6, 2011

Mr. Douglas P. Baker  
Chief Executive Officer  
Applied Nanotech Holdings, Inc.  
3006 Longhorn Boulevard, Suite 107  
Austin, TX 78758

**Re: Applied Nanotech Holdings, Inc.**  
**Form 10-K for fiscal year end December 31, 2009**  
**Filed March 4, 2010**  
**Form 10-Q for the quarter ended September 30, 2010**  
**Filed October 29, 2010**  
**File No. 001-11602**

Dear Mr. Baker:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

s/ Robert Bartelmes

Larry Spigel  
Assistant Director

cc: Via Facsimile to (512) 339-5021  
Attn: Douglas P. Baker  
Chief Executive Officer