



DIVISION OF  
CORPORATION FINANCE

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

September 9, 2010

Anthony J. Orlando  
President and Chief Executive Officer  
Covanta Holding Corporation  
40 Lane Road  
Fairfield, NJ 07004

**Re: Covanta Holding Corporation  
Form 10-K for Fiscal Year Ended December 31, 2009  
Filed February 22, 2010  
Definitive Proxy Statement on Schedule 14A  
Filed April 1, 2010  
File No. 001-06732**

Dear Mr. Orlando:

We have reviewed your response to our comment letter dated July 28, 2010 and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure. You should comply with this comment in all future filings, as applicable. Please confirm in writing that you will do so, and also explain to us in detail sufficient for an understanding of your disclosure how you intend to comply by providing us with your proposed revisions.

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.

1. We note your response to comment 3 in our letter dated July 28, 2010. Please provide us your proposed table that you will include in future filings to disclose how you calculate non-equity incentive compensation payments for each of the named executive officers.

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You may contact Scott Anderegg, Staff Attorney, at (202) 551-3342 or Brigitte Lippmann, Special Counsel, (202) 551-3713 or me at (202) 551-3720 with any questions.

Sincerely,

H. Christopher Owings  
Assistant Director