

Via Facsimile and U.S. Mail
Mail Stop 6010

April 14, 2009

Peter L. Buzy
Chief Financial Officer
Martek Biosciences Corporation
6480 Dobbin Road
Columbia, MD 21045

Re: Martek Biosciences Corporation
Form 10-K for the Fiscal Year Ended October 31, 2008
Filed December 29, 2008
File Number: 000-22354

Dear Mr. Buzy,

We have completed our review of your Form 10-K and have no further comments at this time.

Sincerely,

Carlton E. Tartar
Accounting Branch Chief