February 9, 2010

VIA EDGAR - CORRESPONDENCE

United States Securities and Exchange Commission Division of Corporation Finance 100 F. Street, NE Washington, D.C. 20549

Attention: Brian Cascio, Accounting Branch Chief

Re: Delcath Systems, Inc. ("<u>Delcath</u>" or the "<u>Company</u>") Form 10-K for the fiscal year ended December 31, 2008 Filed March 3, 2009 Form 10-Q for the fiscal quarter ended September 30, 2009 Filed October 23, 2009 File No. 001-16133

Dear Mr. Cascio:

On Thursday, February 4, 2010, a representative of Delcath discussed by telephone with Ms. Kristin Lochhead, Staff Accountant the Company's written response to the Staff's comments set forth in the Staff's January 26, 2010 letter. This letter is a follow-up to that telephone conversation.

Delcath understands the Staff's position that the use of historical volatility as one of our inputs to the Black-Scholes model could be considered a Level 3 input based on FASB ASC 820-10-55-22. As discussed with the Staff, in its future filings, as applicable, Delcath will classify its warrant derivative liability as a Level 3 of the fair-value hierarchy.

If you have further comments or questions related to our response to your letter, please call me at (212) 489-2100 (ext. 226).

Sincerely,

David A. McDonald By: /s/ David A. McDonald Chief Financial Officer

cc: Ms. Kristin Lochhead, Staff Accountant By Facsimile