

June 3, 2010

VIA E-MAIL & EDGAR

Dominic Minore, Esq.
Senior Counsel
Division of Investment Management
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Fifth Street Finance Corp.
Registration Statement on Form N-2 filed on April 12, 2010
File No. 333-166012

Dear Mr. Minore:

Per your request, attached please find a form of preliminary prospectus supplement to the prospectus included in Fifth Street Finance Corp.'s registration statement on Form N-2.

If you have any questions or additional comments concerning the foregoing, please contact the undersigned at (202) 383-0176, or Harry S. Pangas at (202) 383-0805.

Sincerely,

/s/ Steven B. Boehm

Steven B. Boehm

cc: Mr. Leonard M. Tannenbaum/ Chief Executive Officer
Harry S. Pangas, Esq.
Anne W. Gray, Esq.