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

## FORM 8-K

## CURRENT REPORT Pursuant To Section 13 Or 15(d) of The Securities Exchange Act of 1934

Date of report (Date of earliest event reported): October 13, 2009

### **GSC Investment Corp.**

(Exact name of registrant as specified in charter)

Maryland

(State or other jurisdiction of incorporation)

**001-33376** (Commission File Number) 20-8700615 (IRS Employer Identification No.)

888 Seventh Ave, New York, NY 10019 (Address of principal executive offices)

Registrant's telephone number, including area code: (212) 884-6200

N/A

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

• Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

<sup>o</sup> Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

# Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On October 13, 2009, David L. Goret resigned as Vice President, Secretary and Chief Compliance Officer of GSC Investment Corp. (the "Company") and Eric Rubenfeld was elected by the board of directors of the Company to succeed Mr. Goret as Vice President, Secretary and Chief Compliance Officer.

#### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

GSC Investment Corp.

Date: October 14, 2009

By: /s/ Eric Rubenfeld

Name: Eric Rubenfeld Title: Vice President and Secretary