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): April 11, 2016

Axcelis Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

000-30941 (Commission File Number)

34-1818596 (IRS Employer Identification No.)

108 Cherry Hill Drive, Beverly, Massachusetts

(Address of principal executive offices)

01915 (Zip Code)

Registrant's telephone number, including area code: (978) 787-4000

(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:

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events

On or about March 18, 2016, Axcelis Technologies, Inc. (the "Company") made available a proxy statement (the "Proxy Statement") to its stockholders in connection with its 2016 Annual Meeting of Stockholders (the "Annual Meeting"). The Annual Meeting will be held at the offices of Locke Lord LLP, 111 Huntington Avenue, Boston, Massachusetts, at 1:00 p.m. EST on Wednesday, May 4, 2016. The Company's Board of Directors has fixed the close of business on March 11, 2016 as the record date for determination of the stockholders entitled to vote at the Annual Meeting or any adjournment thereof.

Proposal 4 in the Proxy Statement requests that the Company's stockholders authorize the Board of Directors to implement a one-for-four reverse stock split by approving an amendment to the Company's Amended and Restated Certificate of Incorporation. On April 11, 2016, the Company's Board of Directors modified the proposal to amend the Company's Certificate of Incorporation so that, concurrently with the proposed reverse split of the Company's common stock, the number of authorized shares of Common Stock would be reduced proportionally. This would result in the reduction of the number of shares of authorized Common Stock from 300,000,000 to 75,000,000. As a result of this reduction in the authorized common stock, the proportion of authorized and unissued shares (which could be issued by the Board of Directors in the future) to the total authorized shares would remain the same after the reverse split as prior to the reverse split.

The Company has filed with the Securities and Exchange Commission a Schedule 14A Supplement that amends and supplements the Proxy Statement for the Annual Meeting regarding the modification to Proposal 4 on the reverse split. There is no change in the time or place of the Annual Meeting or the record date to determine stockholders entitled to notice of and to vote at the Annual Meeting. Except as described above, the proposed reverse split as described in the Proxy Statement remains unchanged. The Board of Directors continues to recommend unanimously that the stockholders vote FOR the proposals listed in the Proxy Statement, as supplemented. Stockholders do not have to take any action if they have previously voted shares on the Annual Meeting proposals and do not wish to change their vote on any proposal. Stockholders wishing to change their prior votes should consult the Supplement.

SIGNATURE

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.

Date: April 11, 2016 Axcelis Technologies, Inc.

By: /s/ LYNNETTE C. FALLON

Lynnette C. Fallon Executive Vice President HR/Legal and General Counsel