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): August 26, 2007

NANOGEN, INC.

(Exact name of registrant specified in its charter)

Delaware (State or other jurisdiction of incorporation)

000-23541 (Commission File Number) 33-0489621 (I.R.S. Employer

Identification No.)

10398 Pacific Center Court, San Diego, California
(Address of principal executive offices)

Registrant s telephone, including area code: (858) 410-4600

92121 (Zip Code)

(Former name and 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)
- " 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 1.01. Entry into a Material Definitive Agreement.

On August 26, 2007, Nanogen, Inc. (the Company) entered into a Securities Purchase Agreement (the Purchase Agreement) with certain institutional investors (the Purchasers), pursuant to which the Company agreed to issue and sell an aggregate of \$20.0 million in principal amount of the Company s senior convertible notes (the Notes), convertible initially into an aggregate of up to 15,748,030 shares of the Company s common stock (the Common Stock), and Series A warrants (Series A Warrants), Series B warrants (Series B Warrants) and Series C warrants (Series C Warrants , together with the Series A Warrants and Series B Warrants, the Warrants , and together with the Notes, the Securities) to purchase shares of the Common Stock, exercisable initially into an aggregate of 11,023,621 shares of our common stock, and may become exercisable for an additional 6,299,212 shares of our common stock, as described below (the Offering).

In connection with the Offering, the Company also entered into a Placement Agency Agreement (the Placement Agency Agreement) with Seven Hills Partners LLC (the Placement Agent), pursuant to which the Placement Agent acted on a best efforts basis as exclusive placement agent for the Company in the Offering. The Placement Agency Agreement does not give rise to any commitment by the Placement Agent to purchase any of the Securities. The Company agreed to pay the Placement Agent a total placement fee equal to 4.8% of the gross proceeds of the Offering and to reimburse the Placement Agent for certain costs and expenses incurred by it in the Offering.

The Offering is made pursuant to the Company s effective registration statement on Form S-3 (File No. 333-144880) and a registration statement filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended (collectively, the Shelf Registration Statement). The closing of the Offering is scheduled to occur on or about August 27, 2007, subject to satisfaction or waiver of customary closing conditions under the Purchase Agreement and the Placement Agency Agreement. The Company will receive net proceeds of approximately \$19.4 million from the sale of the Securities, after deducting the placement agent fees and estimated Offering expenses payable by the Company.

Letter of Credit

Pursuant to the Purchase Agreement, the Company has obtained a letter of credit from Wells Fargo Bank in the amount of \$7.0 million. The letter of credit was issued in favor of Portside Growth and Opportunity Fund, who acts as the letter of credit agent (the LC Agent) for the benefit of the Purchasers. Prior to the termination of the letter of credit, the LC Agent will be entitled to draw the letter of credit upon (i) occurrence and during the continuance of an event of default under the Indenture (as defined below) or (ii) maturity of the Notes. If any draw is made by the LC Agent under the letter of credit, then within two business days the redemption price under the Notes or any amount due on the maturity date will be reduced by an amount equal to the holder s pro rata portion of the total draw amount. With respect to each holder of the Notes that has delivered a redemption notice upon an Event of Default pursuant to the Indenture, the LC Agent will distribute to such holder its share of the total draw amount in accordance with the terms of the Purchase Agreement.

The Company has agreed to deposit \$7.3 million in cash from the proceeds of the Offering in a cash collateral account with Wells Fargo Bank to secure the Company s reimbursement obligations in respect of the letter of credit. The funds in the cash collateral account will be released to the Company upon the termination of the letter of credit. The letter of credit will terminate if the Company meets certain conditions, which include, but are not limited to, the following: (i) the closing sales price of Common Stock on the NASDAQ Global Market equal to or exceeds \$1.524 per share for 20 out of 30 consecutive trading days; (ii) there is no event of default under the Indenture (as defined below); and (iii) the Common Stock has not been suspended for trading on NASDAQ. The Notes are not secured by any of the assets of the Company or assets of any of its subsidiaries.

Summary of Notes

The terms of the Notes are set forth in an indenture dated as of August 27, 2007 (the Base Indenture) between the Company and The Bank of New York Trust Company, N.A. as trustee (the Trustee), as supplemented by the first supplemental indenture dated as of August 27, 2007 between the Company and the Trustee (together with the Base Indenture, the Indenture).

The initial maturity date of the Notes will be the third anniversary of the issuance date of the Notes, subject to extension under certain circumstances, including an extension for an additional two years if any amounts of the Notes are not converted as of the initial maturity date due to limitations on beneficial ownership. The Notes will bear interest at 6.25% per annum, payable quarterly in arrears commencing on September 30, 2007. The interest will be paid, subject to certain conditions, in cash or shares of Common Stock, or a combination of cash and shares of Common Stock. Upon and during the occurrence of an Event of Default (as defined in the Indenture), the interest rate under the Notes will increase to 12% per annum. In addition, in the event that any payment of principal or other amounts payable under the Notes or other transaction documents in the offering are not paid when due, such past due amounts are subject to a late charge of 15% per annum from the date due until paid.

The principal amount of the Notes, together with any accrued and unpaid interest and any late charges (the Conversion Amount), will be convertible by the holders of the Notes, at any time following their issuance, into shares of Common Stock at an initial conversion price of \$1.27 per share, subject to certain limitations on beneficial ownership. The Conversion Amount will also include the net present value of interest on the Note calculated at a 6.25% discount rate upon any conversion event or redemption event, subject to certain limitations. The conversion price will be subject to certain adjustments set forth in the Indenture, including full ratchet anti-dilution protection for any equity or convertible securities issuances within eighteen months of the issuance of the Notes and weighted-average anti-dilution protection thereafter, subject to customary exceptions and a limitation on the reduction of the conversion price below \$1.2675 without subsequent stockholder approval.

If, at any time after the twenty-four-month anniversary of the issuance date of the Notes, the last closing sale price of the Common Stock on the NASDAQ Global Market (the Closing Sale Price) exceeds \$2.2225 for 20 out of 30 consecutive trading days, then the Company will have the right, subject to compliance with certain conditions, to require holders of the Notes to convert all or any portion of the Conversion Amount into shares of the Common Stock at the then-applicable conversion price, subject to certain limitations on beneficial ownership.

The Indenture contains event of default provisions, which include suspension of Common Stock from trading, failure to cure conversion failures or maintain sufficient shares of common stock available for conversion, breaches of covenants, breaches of material representations, failure to repay certain indebtedness exceeding \$250,000, the occurrence of bankruptcy or similar events, default under our material agreements, and the rendering of a final judgment in excess of \$500,000 not covered by insurance. After the occurrence of an Event of Default, any holder may require the Company to redeem all or a portion of the holder s Note at a redemption price in cash equal to the greater of (i) the product of (x) the Conversion Amount to be redeemed and (y) the applicable redemption premium (120%), and (ii) the product of (A) the Conversion Amount divided by the conversion price in effect at such time as the holder delivers the redemption notice and (B) the greater of (1) Closing Sale Price of the Common Stock on the date immediately preceding the Event of Default, and (2) the Closing Sale Price of the Common Stock on the date immediately after the Event of Default and (3) the Closing Sale Price of the Common Stock on the date the holder delivers the redemption notice.

In connection with a Change of Control (as defined in the Indenture), the holders of the Notes will have the right to require the Company to redeem all or any portion of their Notes at a redemption price (the Change of Control Redemption Price) in cash equal to the sum of (1) accrued and unpaid interest and late charges and (2) the greater of (i) the product of (x) the Conversion Amount (excluding interest and late charges) being redeemed and (y) the quotient determined by dividing (A) the greater of the Closing Sale Price of the Common Stock immediately prior to the consummation of the Change of Control, the Closing Sale Price of the Common Stock immediately following the public announcement of such proposed Change of Control and the Closing Sale Price of the Common Stock immediately prior to the public announcement of such proposed Change of Control by (B) the then applicable conversion price, and (ii) 120% of the Conversion Amount (excluding interest and late charges) being redeemed.

In the event of a Change of Control, the Company has the right to redeem all of the Notes at a price in cash equal to the sum of (1) accrued and unpaid interest on the Notes and late charges and (2) the greater of (i) the product of (x) the Conversion Amount (excluding interest and late charges) of the Notes being redeemed and (y) the quotient determined by dividing (A) the greater of the Closing Sale Price of the Common Stock immediately prior to the consummation of the Change of Control, the Closing Sale Price of the Common Stock immediately following the public announcement of such proposed Change of Control and the Closing Sale Price of the Common Stock

immediately prior to the public announcement of such proposed change of control by (B) the then applicable conversion price, and (ii) 120% (if the acquirer is not a publicly traded company) or 140% (if the acquirer is a publicly traded company) of the Conversion Amount (excluding interest and late charges) of the Notes being redeemed.

Upon the occurrence of certain Fundamental Transaction (as defined in the Indenture), the Company will be required to reaffirm to the holders its obligations under the Notes and financing agreements as well as to provide a confirmation that following the consummation of the Fundamental Transaction, the Note will be convertible into either (i) Common Stock or other shares of publicly traded Common Stock (or their equivalent) of the Company, or the Company as the Successor Entity (as defined inthe Indenture), or (ii) if the Company is not a publicly traded entity following the Fundamental Transaction, the securities or other cash or assets that the Note holder would have received had it converted the Note immediately prior to the consummation of the Fundamental Transaction.

The Indenture contains customary covenants which, among other things, restrict the Company s ability to (i) incur additional indebtedness other than in connection with existing indebtedness or certain other permitted indebtedness under the terms of the Indenture; (ii) grant liens on the Company s assets other than certain ordinary permitted liens; and (iii) make distributions on or repurchase shares of Common Stock.

Summary of Warrants

The Warrants entitle the holders to purchase initially an aggregate of 11,023,622 shares of the Common Stock. Series A Warrants are exercisable at any time during a five (5)-year period following the date of issuance at an initial exercise price of \$1.14. At any time following the termination of the letter of credit, if the closing sales price of the Common Stock is at least 135% of the applicable exercise price of Series A Warrants for 20 out of 30 consecutive trading days, the Company may require holders of the Series A Warrants to exercise the Series A Warrants.

Series B Warrants becomes exercisable only if any Series A Warrant is exercised, whether at the option of the holders or following the Company Exercise Right. The number of exercisable Series B Warrants will equal to the number of Series A Warrants exercised. With respect to Series B Warrants that become exercisable in any calendar quarter, the exercise price will equal to 110% of the Closing Sales Price of the Common Stock on last trading day of such calendar quarter. On the date when all of Series A Warrants are exercised, the exercise price of for any previously unexercised Series B Warrants will equal to 110% of the Closing Sales Price of the Common Stock on such date. Each Series B Warrant has a three (3)-year term from the date on which the Series B Warrant becomes exercisable. The exercise price of Series B Warrants is subject to a floor, so that its exercise price cannot be less than \$1.13 per share.

Series C Warrants are exercisable at any time during a five (5)-year period following the date of issuance at an initial exercise price of \$1.14. At any time after the later of (i) six-month anniversary of the issuance date of Series C Warrants; (ii) thirty (30) days after the date when all Series A Warrants are exercised; and (iii) thirty (30) days after the termination of the letter of credit, if the closing sales price of the Common Stock is at least 125% of the applicable exercise price for 20 out of 30 consecutive trading days, the Company may require holders of the Series C Warrants to exercise the Series C Warrants.

The exercise price of the Warrants will be subject to certain anti-dilution adjustments similar to those set forth in the Notes. In the event of a Fundamental Transaction (as defined in the Warrants), the Purchaser has certain right to require the Company to exchange the Warrants or to reaffirm its obligations after the Fundamental Transaction. The Warrants may only be exercised on a cashless exercise basis in the event that the Shelf Registration Statement or another registration statement is not available at the time of exercise of such Warrants.

The foregoing is a summary description of certain terms of the Purchase Agreement, the Indenture, the Notes, the Warrants and the Placement Agency Agreement and, by its nature, is incomplete. It is qualified in its entirety by the text of the Purchase Agreement, the Indenture, Form of Notes, Forms of Warrants and the Placement Agency Agreement attached as exhibits to this Current Report on Form 8-K and incorporated herein by reference. All readers are encouraged to read the entire text of the Purchase Agreement, the Indenture, Form of Notes, Forms of Warrants and the Placement Agency Agreement attached hereto.

Also as part of the Offering, the Company is filing a prospectus supplement (the Prospectus Supplement), relating to the Offering with the SEC. In connection with the filing of the Prospectus Supplement, the Company is filing, as Exhibit 5.1 hereto, the legal opinion of the Company is counsel, Morgan, Lewis & Bockius LLP, as to the validity of the Notes, the Warrants and the shares of the Common Stock underlying such securities. Exhibit 5.1 is incorporated herein by reference and into the Shelf Registration Statement and Prospectus Supplement. This Current Report on Form 8-K shall be deemed incorporated into the Shelf Registration Statement and the Prospectus Supplement.

This Current Report on Form 8-K shall not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant The information contained in Item 1.01 of this Current Report on Form 8-K is incorporated in this Item 2.03 by reference

Item 7.01. Regulation FD Disclosure.

On August 27, 2007, the Company issued a press release announcing that definitive agreements had been entered into with respect to the Offering. A copy of the press release is attached hereto as Exhibit 99.1 and incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

- (d) Exhibits. The following documents are filed as exhibits to this report:
- 4.1 Indenture, dated as of August 27, 2007, between Nanogen, Inc. and The Bank of New York Trust Company, N.A.
- 4.2 First Supplemental Indenture, dated as of August 27, 2007 between Nanogen, Inc. and The Bank of New York Trust Company, N.A.
- 5.1 Opinion of Morgan, Lewis & Bockius LLP.
- 10.1 Securities Purchase Agreement, dated as of August 26, 2007, by and among Nanogen, Inc. and the Purchasers.
- 10.2 Form of Notes.
- 10.3 Form of Series A Warrants.
- 10.4 Form of Series B Warrants.
- 10.5 Form of Series C Warrants.
- 10.6 Placement Agency Agreement, dated as of August 26, 2007, between Nanogen, Inc. and Seven Hills Partners LLC.
- 23.1 Consent of Morgan, Lewis & Bockius LLP (included in its opinion as Exhibit 5.1).
- 99.1 Press Release dated August 27, 2007.

SIGNATURES

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

NANOGEN, INC.

Date: August 27, 2007 By: /s/ Robert Saltmarsh

Name: Robert Saltmarsh Title: Chief Financial Officer