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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| (Print or Type Responses) | | | | | | | | | | |
|--|--|--|---------------|----------|------------------------|--|---|--|--|---|
| 1. Name and Address of Reporting Person [*] WEINER BARRY W | 2. Issuer Name and ENZO BIOCHE | | | g Symbol | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | |
| (Last) (First) C/O ENZO BIOCHEM, 527 MADIS | ONT ATTENTION | 3. Date of Earliest Transaction (Month/Day/Year) 12/18/2007 | | | | | X_ Officer (give title below) Other (specify below) President and CFO | | | |
| (Street) NEW YORK, NY 10022 | | 4. If Amendment, Da | te Original 1 | Filed | Month/Day/Ye | ar) | 6. Individual or Joint/Group Filing(Check Applicable Line) _X_Form filed by One Reporting Person Form filed by More than One Reporting Person | | | |
| (City) (State) | (Zip) | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Own | | | | | | | ed | |
| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if) any (Month/Day/Year) | (Instr. 8) | ion | (A) or Disposed of (D) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) | 7. Nature of Indirect Beneficial Ownership |
| | | | Code | v | Amount | (A) or (D) | Price | × · · · · | or Indirect (I) (Instr. 4) | |
| Common Stock, par value \$0.01 per share | 12/18/2007 | | С | | 10,179 (<u>1)</u> | А | <u>(1)</u> | 1,398,369 (2) | D | |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained SEC 1474 (9-02) in this form are not required to respond unless the form displays a currently valid OMB control number.

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

| | (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | |
|---|---|--------------------------|---|------|-----------|--------------------------------------|---|--|--------------------|--|--|--|------------------------|-------------------|--|--------------------------------------|--|---|---------------------------------------|
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | Code | tion) | of E Sect Acq or E of (I | Derivative urities uired (A) Disposed D) tr. 3, 4, | 6. Date Exercisable and Expiration Date (Month/Day/Year) A) | | 6. Date Exercisable and Expiration Date | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | ate of Underlying | | Derivative Security (Instr. 5) | Derivative Securities Beneficially Owned Following | Ownership Form of Derivative Security: Direct (D) or Indirect (I) | Beneficial Ownership (Instr. 4) |
| | | | | Code | v | (A) | | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | (Instr. 4) | (Instr. 4) | | | | | |
| Employee Stock Options | \$ 10.97 | 12/18/2007 | | С | | | 63,814 | 12/18/1997 | 12/18/2007 | Common Stock, par value \$0.01 per share | 63,814 | \$ 0 | 459,528 ⁽²⁾ | D | | | | | |

Reporting Owners

| | Relationships | | | | | | | |
|--|---------------|--------------|-------------------|-------|--|--|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | | | |
| WEINER BARRY W C/O ENZO BIOCHEM 527 MADISON AVENUE NEW YORK, NY 10022 | Х | | President and CFO | | | | | |

Signatures

| /s/ Barry Weiner | 12/20/2007 |
|-------------------------------|------------|
| Signature of Reporting Person | Date |

Explanation of Responses:

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

- (1) The Reporting Person exercised a stock option to purchase 63,814 shares of Common Stock and paid the exercise price thereof by the surrender of 52,632 shares of Common Stock, for a net gain in outstanding shares of Common Stock of 10,179 shares. The stated exercise price of the stock option was \$10.97.
- As of the date hereof, the Reporting Person directly beneficially owned 459,528 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the (2) date hereof, 3,642 shares of Common Stock that the Reporting Person holds as custodian for certain of his children, 5,000 shares of restricted Common Stock that vest within 60 days from the date hereof and 4,923 shares of Common Stock held in the Issuer's 401(k) plan.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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