

(Print or Type Responses)

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

| OMB APPROVAL | | | | |
|--------------------------|-----------|--|--|--|
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| nours per response (| | | | |

INITIAL STATEMENT OF 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

| Name and Address of Reporting Person * BORTZ GREGORY M. | 2. Date of Event Requiring Statement (Month/Day/Year) -01/29/2010 | | | 3. Issuer Name and Ticker or Trading Symbol ENZO BIOCHEM INC [ENZ] | | | | | |
|--|---|--|--|--|--|-----------------------------|--|---|--|
| (Last) (First) (Middle) C/O ENZO BIOCHEM, INC., 527 MADISON AVENUE | 01/29/2010 | | | Issuer | (Check all applicable) | | | 5. If Amendment, Date Original Filed(Month/Day/Year) | |
| (Street) NEW YORK, NY 10022 | | | | | Officer (give title Other (specify | | 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 Beneficially Owned | | | | | | | |
| 1. Title of Security (Instr. 4) | 6 | Be (Ir | eneficia nstr. 4) | nt of Securities ally Owned | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature (Instr. 5) | | ct Beneficial Ownership | |
| unless the form dis | nd to the c plays a cu | collection or rrently val | of info | ormation contained in B control number. | | · | | | |
| 1. Title of Derivative Security (Instr. 4) | and Expiration Date Month/Day/Year) S | | 3. Title and Amount of Securities Underlying Derivati Security (Instr. 4) | | 4. Conversion | 5. Owr Form of Deriva | nership of | 6. Nature of Indirect Beneficial Ownership (Instr. 5) | |
| | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | Security | (D) or (I) (Instr. | Indirect 5) | | |
| Reporting Owners | | | | | | | | | |

| | Relationships | | | | |
|--|---------------|--------------|---------|-------|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | |
| BORTZ GREGORY M. C/O ENZO BIOCHEM, INC. 527 MADISON AVENUE NEW YORK, NY 10022 | X | | | | |

Signatures

| /s/ Gregory M. Bortz | 02/10/2010 |
|---------------------------------|------------|
| **Signature of Reporting Person | Date |

Explanation of Responses:

No securities are beneficially owned

- If the form is filed by more than one reporting person, see Instruction 5(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).

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

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.