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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

| 1. Name and Address of F Perlysky Dov | 2. Issuer Name and Ticker or Trading Symbol ENZO BIOCHEM INC [ENZ] | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X_ Director10% Owner | | | | |
|--|---|------------|--|--------------------|---|---|--|--|---|--|-------------------------|
| (Last) C/O ENZO BIOCHE AVENUE | 3. Date of Earliest Transaction (Month/Day/Year) 01/14/2019 | | | | | | Officer (give title below)O | Other (specify b | elow) | | |
| (Street) NEW YORK, NY 10022 | | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | | | | | 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 Acqui | | | | | ired, Disposed of, or Beneficially Owned | | | |
| (Instr. 3) | | | 2A. Deemed Execution Date, if any | (Instr. 8) | | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | of (D) | Owned Following Reported Transaction(s) | Ownership In | Beneficial |
| | | | (Month/Day/Year) | Code | V | Amount | (A) or (D) | Price | (Instr. 3 and 4) | Direct (D) or Indirect (I) (Instr. 4) | Ownership (Instr. 4) |
| Common Stock | | 01/14/2019 | | M <mark>(1)</mark> | | 9,184 | А | \$ 2.70 | 65,787 | D | |
| Common Stock | | | | | | | | | 523,457 | Ι | See Footnotes (2) |

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

 (a a pute calls warrants options convertible securities)

| | (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | |
|-------------|--|------------------|------------------|-----------|---------------------------|--------------|-----------------|------------------|---------------|------------------|------------|------------|----------------|-------------|------------|
| 1. Title of | | 3. Transaction | 3A. Deemed | | | | | | | | | 10. | 11. Nature | | |
| | Conversion | | | Transac | Transaction of Derivative | | Expiration Date | | of Underlying | | Derivative | Derivative | Ownership | of Indirect | |
| Security | or Exercise | (Month/Day/Year) | any | Code | | Secu | urities | (Month/Day/Year) | | Securities | | Security | Securities | Form of | Beneficial |
| (Instr. 3) | Price of | | (Month/Day/Year) | (Instr. 8 |) | Acquired (A) | | | | (Instr. 3 and 4) | | (Instr. 5) | Beneficially | Derivative | Ownership |
| | Derivative | | | | | or D | or Disposed | | | | | | Owned | Security: | (Instr. 4) |
| | Security | | | | | of (I | D) |)) | | | | | Following | Direct (D) | |
| | | | | | | (Ins | tr. 3, 4, | | | | | Reported | or Indirect | | |
| | | | | | | and | 5) | | | | | | Transaction(s) | (I) | |
| | | | | | | | | | | | Amount | | (Instr. 4) | (Instr. 4) | |
| | | | | | | | | | | | or | | | | |
| | | | | | | | | | Expiration | | Number | | | | |
| | | | | | | | | Exercisable | Date | | of | | | | |
| | | | | Code | V | (A) | (D) | | | | Shares | | | | |
| G (1 | | | | | | () | | | | | | | | | |
| Stock | | | | | | | | | | | | | | | |
| option | | | | | | | | | | | | | | | |
| (to | | / / | | | | | | | | Common Stock | | | | _ | |
| acquire | \$ 2.70 | 01/14/2019 | | Μ | | | 64,286 | <u>(1)</u> | 01/17/2019 | Stock | 64,286 | \$ 0 | 175,346 | D | |
| - | | | | | | | | | | SIUCK | | | | | |
| common | | | | | | | | | | | | | | | |
| stock) | | | | | | | | | | | | | | | |
| | I | | | | | | | | | | | | | | |

Reporting Owners

| | Relationships | | | | | | |
|--|---------------|--------------|---------|-------|--|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | | |
| Perlysky Dov C/O ENZO BIOCHEM, INC. 527 MADISON AVENUE NEW YORK, NY 10022 | Х | | | | | | |

Signatures

| /s/ Dov Perlysky | 01/18/2019 |
|---------------------------------|------------|
| **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) Represents an exercise of options to acquire 64,286 shares, which, after the company withheld the exercise price for such options, resulted in a delivery of 9,184 shares of common stock to the reporting person.

Includes (i) 33,139 shares owned by Laya Perlysky (Mr. Perlysky's wife) of which Mr. Perlysky disclaims beneficial ownership, (ii) 109,237 shares owned directly by RSD 2012 GRAT, of which Mr. Perlysky is the trustee of which Mr. Perlysky disclaims beneficial ownership, (iii) 45,000 shares owned by Sky Ventures LLC, of which Mr. Perlysky is the manager and of

(2) which Dov Perlysky disclaims beneficial ownership, (iv) 325,875 shares owned by Kinder Investments LLP, an entity of which Dov Perlysky is the Managing Member of the General Partner and of which Dov Perlysky disclaims beneficial ownership, (v) 6,981 shares owned by Krovim LLC, an entity of which Dov Perlysky is the Managing Member of the General Partner, and children of Dov Perlysky own a 27.54% interest, and of which Dov Perlysky disclaims beneficial ownership and (vi) 3,225 shares owned by MidAtlantic Capital Lending LLC, an entity of which Dov Perlysky owns 1% and of which Dov Perlysky disclaims beneficial ownership.

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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