

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

FORM S-3
REGISTRATION STATEMENT
Under the Securities Act of 1933

Enzo Biochem, Inc.

(Exact name of Registrant as specified in its charter)

New York
(State or other jurisdiction of
incorporation)

13-2866202
(I.R.S. Employer
Identification Number)

**527 Madison Avenue
New York, NY 10022
(212) 583-0100**

(Address, including zip code and telephone number, including area code, of registrant's principal executive offices)

**Barry W. Weiner
Enzo Biochem, Inc.
527 Madison Avenue
New York, NY 10022
(212) 583-0100**

(Name, address, including zip code and telephone number, including area code, of agent for service)

Copies to:
**Robert H. Cohen, Esq.
McDermott Will & Emery LLP
340 Madison Avenue
New York, NY 10173
(212) 547-5400**

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered (1)	Amount to be registered (1)	Proposed maximum offering price per unit (2)	Proposed maximum aggregate offering price (2)(3)	Amount of registration fee (4)
Common Stock, \$0.01 par value per share	—			
Preferred Stock, \$0.01 par value per share	—			
Depository Shares (5)	—			
Debt Securities	—			
Warrants	—			
Units	—			
Total			\$ 50,000,000	\$ 6,820(6)

- (1) This registration statement covers the registration of such indeterminate number of shares of common stock, such indeterminate number of shares of preferred stock, such indeterminate principal amount of debt securities, such indeterminate number of depository shares, and such indeterminate number of warrants to purchase common stock, preferred stock, depository shares or debt securities and units consisting of any combination of such securities as shall have an aggregate initial offering price not to exceed \$50,000,000. In this prospectus, we refer to the common stock, preferred stock, depository shares, debt securities, warrants and units collectively as “securities.” If any debt securities are issued at an original issue discount, then the offering price of such debt securities shall be in such greater principal amount as shall result in an aggregate initial offering price not to exceed \$50,000,000, less the aggregate dollar amount of all securities previously issued hereunder. This registration statement also covers an indeterminate amount of securities that may be issued in exchange for, or upon conversion or exercise of preferred stock, depository shares, debt securities or warrants being registered hereunder or pursuant to the antidilution provisions of any such securities. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder.
- (2) In United States dollars or the equivalent thereof in any other currency, currency unit or units, or composite currency or currencies.
- (3) The proposed maximum per unit and aggregate offering prices per class of security will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3.
- (4) Calculated pursuant to Rule 457(o) under the Securities Act of 1933.
- (5) Represents depository shares, evidenced by depository receipts, issued pursuant to a deposit agreement. In the event the registrant issues fractional interests in shares of the preferred stock registered hereunder, depository receipts will be distributed to purchasers of such fractional interests, and such shares of preferred stock will be issued to a depository under the terms of a deposit agreement.
- (6) Pursuant to Rule 415(a)(6) and Rule 457(p) under the Securities Act, the registrant hereby offsets the total registration fee due under this registration statement by the amount of the filing fee associated with the unsold securities from the registrant’s Form S-3 Registration Statement, filed with the Commission on July 2, 2010 (SEC File No. 333-168311), registering securities for a maximum aggregate offering price of \$50,000,000 (the “Prior Registration Statement”). The associated filing fee of \$2,106 for the \$29,524,250 of securities remaining under the Prior Registration Statement is hereby used to offset the current registration fee due. Pursuant to Rule 415(a)(6), the offering of such securities registered under the Prior Registration Statement will be deemed terminated as of the date of effectiveness of this registration statement.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This registration statement contains two prospectuses:

- a base prospectus which covers the offering, issuance and sale of such indeterminate number of shares of common stock, preferred stock, depositary shares, debt securities, warrants, and units, which together shall have an aggregate initial offering price not to exceed \$50,000,000; and
- a sales agreement prospectus covering the offering, issuance and sale of shares of the Registrant's common stock that, may be issued and sold under a sales agreement, between the Registrant and Cantor Fitzgerald & Co., or Cantor, in an aggregate amount of up to \$18,000,000.

The base prospectus immediately follows this explanatory note. The specific terms of any securities to be offered pursuant to the base prospectus will be specified in a prospectus supplement to the base prospectus. The sales agreement prospectus immediately follows the base prospectus. The common stock that may be offered, issued and sold under the sales agreement prospectus is included in the \$50,000,000 of securities that may be offered, issued and sold by the Registrant under the base prospectus.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS, SUBJECT TO COMPLETION, DATED AUGUST 1, 2013



ENZO BIOCHEM, INC.

\$50,000,000

**Common Stock
Preferred Stock
Depositary Shares
Debt Securities
Warrants
Units**

We may from time to time offer and sell common stock, preferred stock, depositary shares, debt securities, warrants, and units, having an aggregate offering price of up to \$50,000,000. We may offer and sell these securities separately or together in any combination. We may offer and sell these securities to or through underwriters, directly to investors or through agents. We will specify the terms of the securities, and the names of any underwriters or agents and their respective compensation, in supplements to this prospectus. Our common stock is listed on the New York Stock Exchange under the symbol "ENZ". On July 29, 2013, the last reported sale price of our common stock on the New York Stock Exchange was \$2.14 per share.

You should read this prospectus and any prospectus supplement carefully before you invest in any of our securities.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE RISK FACTORS DESCRIBED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND CERTAIN OF OUR FILINGS WITH THE SECURITIES AND EXCHANGE COMMISSION, AS DESCRIBED UNDER "RISK FACTORS" ON PAGE 2.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is , 2013.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the “SEC”), using a “shelf” registration process. Under this shelf process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$50,000,000. We have provided to you in this prospectus a general description of the securities we may offer. Each time we sell securities under this shelf registration process, we will provide a prospectus supplement that will contain specific information about the terms of the offering. We may also add, update or change in the prospectus supplement or any “free writing prospectus” we may authorize to be delivered to you any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement or any free writing prospectus we may authorize to be delivered to you, you should rely on the information in the prospectus supplement or free writing prospectus, as the case may be, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus or any prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

An investment in our securities involves certain risks that should be carefully considered by prospective investors. See “Risk Factors.”

We incorporate by reference important business and financial information about us into this prospectus. You may obtain the information incorporated by reference into this prospectus without charge by following the instructions under “Where You Can Find More Information.” You should carefully read this prospectus and any prospectus supplement as well as additional information described under “Incorporation of Certain Documents by Reference.” All references in this prospectus to “Enzo Biochem,” “Enzo,” the “Company,” “we,” “us” or “our” mean Enzo Biochem, Inc., unless we state otherwise or the context otherwise requires.

You should rely only on the information contained in, or incorporated by reference into, this prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer is not permitted. The information contained in this prospectus is accurate only as of the date of this prospectus and the information in the documents incorporated by reference in this prospectus is accurate only as of the date the documents were filed with the SEC, regardless of the time of delivery of this prospectus or the time of issuance or resale of any securities. Our business, financial condition, results of operations and prospects may have changed since those dates.

SUMMARY

The following summary provides an overview of certain information about our company and the offering and may not contain all the information that may be important to you. This summary is qualified in its entirety by and should be read together with the information contained in other parts of this prospectus. You should carefully read this entire prospectus before making a decision about whether to invest in any of our securities.

Enzo Biochem, Inc.

Our Business Strategy and Objective

We are a growth-oriented integrated life sciences and biotechnology company focused on harnessing biological processes to develop research tools, diagnostics and therapeutics and serve as a provider of test services, including esoteric tests, to the medical community. Since our founding in 1976, our strategic focus has been on the development of enabling technologies in research, development, manufacturing, licensing and marketing of innovative health care products, platforms and services based on molecular and cellular technologies. Our pioneering work in genomic analysis coupled with our extensive patent estate and enabling platforms have strategically positioned the Company to play an important role in the rapidly growing life sciences and molecular medicine marketplaces.

In the course of our research and development activities, we have built a substantial portfolio of intellectual property assets, comprising 114 key issued patents worldwide, and over 250 pending patent applications, along with extensive enabling technologies and platforms.

We are comprised of three operating segments, of which the Therapeutics and Life Sciences segments have evolved out of our core competencies: the use of nucleic acids as informational molecules and the use of compounds for immune modulation and augmented by the acquisition of a number of related companies. Below are brief descriptions of each of our operating segments:

Enzo Clinical Labs is a regional clinical laboratory serving the New York, New Jersey and Eastern Pennsylvania medical communities. The Company believes having clinical diagnostic services allows us to capitalize first hand on our extensive advanced molecular and cytogenetic capabilities and the broader trends in predictive and personalized diagnostics. Enzo Clinical Labs offers a menu of routine and esoteric clinical laboratory tests or procedures used in general patient care by physicians to establish or support a diagnosis, monitor treatment or medication, and search for an otherwise undiagnosed condition. We operate a full-service clinical laboratory in Farmingdale, New York, a network of over 30 patient service centers throughout New York and New Jersey, a stand-alone “stat” or rapid response laboratory in New York City and a full-service phlebotomy and in-house logistics department.

Enzo Life Sciences manufactures, develops and markets products and tools to life sciences, drug development and clinical research customers world-wide and has amassed a large patent and technology portfolio. Enzo Life Sciences, Inc. is a recognized leader in labeling and detection technologies across research and diagnostic markets. Our strong portfolio of proteins, antibodies, peptides, small molecules, labeling probes, dyes and kits provides life science researchers tools for target identification/validation, high content analysis, gene expression analysis, nucleic acid detection, protein biochemistry and detection, and cellular analysis. We are internationally recognized and acknowledged as a leader in manufacturing, in-licensing, and commercialization of over 7,500 of our own products and in addition distribute over 30,000 products made by over 40 other original manufacturers. Our strategic focus is directed to innovative high quality research reagents and kits in the primary key research areas of genomics, cellular analysis, small molecule chemistry, protein homeostasis epigenetics immunoassays and assay development.

The segment is an established source for a comprehensive panel of products to scientific experts in the fields of cancer, cardiovascular disease, neurological disorders, diabetes and obesity, endocrine disorders, infectious and autoimmune disease, hepatotoxicity and renal injury.

Enzo Therapeutics is a biopharmaceutical venture that has developed multiple novel approaches in the areas of gastrointestinal, infectious, ophthalmic and metabolic diseases, many of which are derived from the pioneering work of Enzo Life Sciences. Enzo Therapeutics has focused its efforts on developing treatment regimens for diseases and conditions for which current treatment options are ineffective, costly, and/or cause unwanted side

effects. This focus has generated a clinical and preclinical pipeline, as well as more than 45 patents and patent applications.

Our primary sources of revenue have historically been from product revenues and royalty and licensing of Enzo Life Sciences' products utilized in life science research and from the clinical laboratory services provided to the healthcare community.

Corporate Information

Our offices are located at 527 Madison Avenue, New York, New York 10022, and our telephone number is (212) 583-0100. We maintain a website at www.enzo.com. Our website and the information contained therein or connected thereto are not incorporated by reference and are not a part of this prospectus.

RISK FACTORS

Before you invest in our securities, in addition to the other information, documents or reports included or incorporated by reference in this prospectus and in any prospectus supplement, you should carefully consider the risk factors set forth in the section entitled "Risk Factors" in any prospectus supplement as well as in "Part I, Item 1A. Risk Factors" in our most recent annual report on Form 10-K and in "Part II, Item 1A. Risk Factors" in our quarterly reports on Form 10-Q filed subsequent to such Form 10-K, which are incorporated by reference into this prospectus and any prospectus supplement in their entirety, as the same may be updated from time to time by our future filings under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Each of the risks described in these sections and documents could materially and adversely affect our business, financial condition, results of operations and prospects and the market price of our shares and any other securities we may issue. Moreover, the risks and uncertainties discussed in the foregoing documents are not the only risks and uncertainties that we face, and our business, financial condition, results of operations and prospects and the market price of our shares and any other securities we may issue could be materially adversely affected by other matters that are not known to us or that we currently do not consider to be material risks to our business.

FORWARD-LOOKING STATEMENTS

This prospectus, the documents incorporated by reference herein and any related free writing prospectus may contain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance or achievement to be materially different from any future results, levels of activity, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" and similar expressions intended to identify forward-looking statements. While we believe that we have a reasonable basis for each forward-looking statement, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. We discuss many of these risks, uncertainties and other factors in greater detail under the heading "Risk Factors" contained in this prospectus. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should read carefully this prospectus, together with the information incorporated herein by reference as described under the heading "Where You Can Find More Information" in this prospectus, completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify all of our forward-looking statements by these cautionary statements.

Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated:

	Nine Months Ended April 30,	Fiscal Year Ended July 31,				
	2013	2012	2011	2010	2009	2008
Ratio of Earnings to Fixed Charges	N/A	N/A	N/A	N/A	N/A	N/A
Dollar amount of deficiency (in thousands)	\$ (15,390)	\$ (40,915)	\$ (12,821)	\$ (22,257)	\$ (23,439)	\$ (10,892)

For purposes of calculating our ratio of earnings to fixed charges, earnings consist of earnings from continuing operations before income taxes, adjusted for the portion of fixed charges deducted from the earnings, less capitalized interest. Fixed charges consist of interest on all indebtedness, including capitalized interest, amortization of debt issuances costs and the estimated interest component of rent expense.

We currently have no issued and outstanding preferred stock.

USE OF PROCEEDS

Unless otherwise specified in the applicable prospectus supplement, we intend to use the net proceeds from the sale of securities offered by this prospectus for general corporate purposes, including without limitation, the funding of future acquisitions, the funding of our clinical research and development programs, the clinical development of our product capabilities, capital expenditures and working capital needs. We will set forth in the prospectus supplement our intended use for the net proceeds received from the sale of any securities.

THE SECURITIES WE MAY OFFER

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize all the material terms and provisions of the various types of securities that we may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement information, where applicable, about material United States federal income tax considerations relating to the securities, and the securities exchange, if any, on which the securities will be listed.

We may sell from time to time, in one or more offerings:

- common stock;
- preferred stock;
- depositary shares;
- debt securities;
- warrants to purchase any of the securities listed above; and
- units consisting of any combination of the securities listed above.

In this prospectus, we refer to the common stock, preferred stock, depositary shares, debt securities, warrants and units collectively as "securities." The total dollar amount of all securities that we may sell pursuant to this prospectus will not exceed \$50,000,000.

If we issue debt securities at a discount from their original stated principal amount, then, for purposes of calculating the total dollar amount of all securities issued under this prospectus, we will treat the initial offering price of the debt securities as the total original principal amount of the debt securities.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

General Matters

Pursuant to our Certificate of Incorporation, as amended, the total amount of our authorized capital stock is 100,000,000 shares, which consists of 75,000,000 shares of authorized common stock, par value \$0.01 per share, and 25,000,000 shares of authorized preferred stock, par value \$0.01 per share. As of April 30, 2013, we had outstanding 39,676,518 shares of common stock and no shares of preferred stock. As of June 30, 2013, we had approximately 908 holders of record of our common stock.

The following summary of our capital stock does not purport to be complete and is subject to and qualified in its entirety by, our Certificate of Incorporation, as amended, and our Amended and Restated By-laws, which are filed as exhibits to the registration statement of which this prospectus forms a part.

Common Stock

The holders of shares of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. All shares of our common stock are entitled to share equally in any dividends our board of directors may declare from legally available sources. Our common stock is traded on the New York Stock Exchange under the symbol "ENZ". The section below entitled "Certain Provisions of New York Law and of the Company's Charter and By-laws" contains additional information regarding the rights and preferences of our common stock. The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue shares of preferred stock in one or more series and to fix and determine the following terms of the preferred stock by resolution: variations in the designations, preferences, and relative, participating, optional or other special rights (including, without limitation, special voting rights, of conversion in common stock or other securities, redemption provisions or sinking fund provisions) as between series and between the preferred stock and any series thereof and the common stock, and the qualifications, limitations or restrictions of such rights, all as shall be stated in a resolution of the board of directors. Shares of preferred stock or any series thereof may have full or limited voting powers, or be without voting powers, all as shall be stated in a resolution of the board of directors.

Any or all of these rights may be greater than the rights of our common stock. We currently have no issued and outstanding preferred stock.

Our board of directors, without stockholder approval, can issue preferred stock with voting, conversion or other rights that could negatively affect the voting power and other rights of the holders of our common stock. Preferred stock could thus be issued quickly with terms calculated to delay or prevent a change in control of the Company or to make it more difficult to remove the Company's management. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

DESCRIPTION OF DEPOSITARY SHARES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the depositary shares that we may offer under this prospectus. The following statements with respect to the depositary shares and depositary receipts are summaries of, and subject to, the detailed provisions of a deposit agreement to be entered into by Enzo Biochem and a

depository to be selected at the time of issue (the “depository”) and the form of depository receipt. The form of deposit agreement and the form of depository receipt will be filed with the SEC.

General

We may, at our option, elect to issue fractional shares of preferred stock, rather than full shares of preferred stock. In the event such option is exercised, we may elect to have a depository issue receipts for depository shares, each receipt representing a fraction, to be set forth in the prospectus supplement relating to a particular series of preferred stock, of a share of a particular series of preferred stock as described below.

The shares of any series of preferred stock represented by depository shares will be deposited under a deposit agreement between us and a bank or trust company that we select. Subject to the terms of the deposit agreement, each owner of a depository share will be entitled, in proportion to the applicable fraction of a share of preferred stock represented by such depository share, to all the rights and preferences of the preferred stock represented by the depository share, including dividend, voting, redemption and liquidation rights.

Depository Receipts

The depository shares will be evidenced by depository receipts issued pursuant to the deposit agreement. Depository receipts will be distributed to those persons purchasing the fractional shares of preferred stock in accordance with the terms of an offering of the preferred stock.

Withdrawal of Preferred Stock

Upon surrender of depository receipts at the office of the depository and upon payment of the charges provided in the deposit agreement, a holder of depository receipts may have the depository deliver to the holder the whole shares of preferred stock relating to the surrendered depository receipts. Holders of depository shares may receive whole shares of the related series of preferred stock on the basis set forth in the related prospectus supplement for such series of preferred stock, but holders of such whole shares will not after the exchange be entitled to receive depository shares for their whole shares. If the depository receipts delivered by the holder evidence a number of depository shares in excess of the number of depository shares representing the number of whole shares of the related series of preferred stock to be withdrawn, the depository will deliver to the holder at the same time a new depository receipt evidencing such excess number of depository shares.

Dividends and Other Distributions

The depository will distribute all cash dividends or other cash distributions received for the preferred stock to the record holders of depository shares relating to the preferred stock in proportion to the numbers of such depository shares owned by such holders.

In the event of a distribution other than in cash, the depository will distribute property received by it to the record holders of depository shares entitled thereto, unless the depository determines that it is not feasible to make distribution of the property. In that case the depository may, with our approval, sell such property and distribute the net proceeds from the sale to such holders.

Redemption of Depository Shares

If a series of preferred stock represented by depository shares is subject to redemption, the depository shares will be redeemed from the proceeds received by the depository resulting from the redemption, in whole or in part, of the series of preferred stock held by the depository. The redemption price per depository share will be equal to the applicable fraction of the redemption price per share payable with respect to the series of the preferred stock. Whenever we redeem shares of preferred stock held by the depository, the depository will redeem as of the same redemption date the number of depository shares representing shares of preferred stock redeemed by us. If less than all the depository shares are to be redeemed, the depository shares to be redeemed will be selected by lot or pro rata as may be determined by the depository.

Voting the Preferred Stock

Upon receipt of notice of any meeting at which the holders of the preferred stock are entitled to vote, the depositary will mail the information contained in such notice of meeting to the record holders of the depositary shares relating to such preferred stock. Each record holder of such depositary shares on the record date, which will be the same date as the record date for the preferred stock, will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of the preferred stock represented by such holder's depositary shares. The depositary will endeavor, insofar as practicable, to vote the amount of the preferred stock represented by such depositary shares in accordance with such instructions, and we will agree to take all action which may be deemed necessary by the depositary in order to enable the depositary to do so. The depositary will not vote the preferred stock to the extent it does not receive specific instructions from the holders of depositary shares representing such preferred stock.

Amendment and Termination of the Deposit Agreement

We and the depositary at any time may amend the form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement. However, any amendment which materially and adversely alters the rights of the holders of depositary shares will not be effective unless such amendment has been approved by the holders of at least a majority of the depositary shares then outstanding. We or the depositary may terminate the deposit agreement only if all outstanding depositary shares have been redeemed, or there has been a final distribution in respect of the preferred stock in connection with any liquidation, dissolution or winding up of Enzo Biochem and such distribution has been distributed to the holders of depositary receipts.

Charges of Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay charges of the depositary in connection with the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary receipts will pay other transfer and other taxes and governmental charges and such other charges as are expressly provided in the deposit agreement to be for their accounts.

Miscellaneous

The depositary will forward to the record holders of the depositary shares relating to such preferred stock all reports and communications from us which are delivered to the depositary.

Neither we nor the depositary will be liable if either one is prevented or delayed by law or any circumstance beyond their control in performing the obligations under the deposit agreement. The obligations of Enzo Biochem and the depositary under the deposit agreement will be limited to performance in good faith of their duties thereunder, and they will not be obligated to prosecute or defend any legal proceeding in respect of any depositary shares or preferred stock unless satisfactory indemnity is furnished. The depositary may rely upon written advice of counsel or accountants, or information provided by persons presenting preferred stock for deposit, holders of depositary receipts or other persons believed to be competent and on documents believed to be genuine.

Resignation and Removal of Depositary

The depositary may resign at any time by delivering to us notice of its election to do so, and we may at any time remove the depositary, any such resignation or removal to take effect upon the appointment of a successor depositary and its acceptance of such appointment. Such successor depositary must be appointed within sixty (60) days after delivery of the notice of resignation or removal.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus and the related indenture. While the terms we have summarized below will apply generally to any future debt securities we may offer pursuant to this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. If we indicate in a prospectus supplement,

the terms of any debt securities we offer under that prospectus supplement may differ from the terms we describe below.

We may offer debt securities from time to time in one or more offerings under this prospectus. We will issue any such debt securities under an indenture that we will enter into with a trustee to be named in the indenture. We have filed a form of indenture as an exhibit to the registration statement of which this prospectus is a part. The indenture will be qualified under the Trust Indenture Act of 1939, as in effect on the date of the indenture. We use the term “debenture trustee” to refer to the trustee under the indenture.

The following summaries of material provisions of the debt securities and the indenture are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities.

General

The indenture provides that debt securities may be issued from time to time in one or more series. The indenture does not limit the amount of debt securities that may be issued thereunder, and the indenture provides that the specific terms of any series of debt securities shall be set forth in, or determined pursuant to, an authorizing resolution, an officers’ certificate and/or a supplemental indenture, if any, relating to such series.

We will describe in each prospectus supplement the following terms relating to a series of debt securities:

- the title or designation of the debt securities;
- whether the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt securities;
- any limit upon the aggregate principal amount of the debt securities;
- the date or dates on which the debt securities may be issued and on which we will pay the principal on the debt securities;
- the interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the date or dates interest will be payable and the record dates for interest payment dates or the method for determining such dates;
- the manner in which the amounts of payment of principal of, premium or interest on the debt securities will be determined, if these amounts may be determined by reference to an index based on a currency or currencies other than that in which the debt securities are denominated or designated to be payable or by reference to a commodity, commodity index, stock exchange index or financial index;
- the currency of denomination of the debt securities;
- if payments of principal of, premium or interest on the debt securities will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to these payments will be determined;
- the place or places where the principal of, premium, and interest on the debt securities will be payable, where debt securities of any series may be presented for registration of transfer, exchange or conversion, and where notices and demands to or upon the Company in respect of the debt securities may be made;

- the form of consideration in which principal of, premium or interest on the debt securities will be paid;
- the terms and conditions upon which we may redeem the debt securities;
- any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund, amortization or analogous provisions or at the option of a holder of debt securities;
- the dates on which and the price or prices at which we will repurchase the debt securities at the option of the holders of debt securities and other detailed terms and provisions of these repurchase obligations;
- the denominations in which the debt securities will be issued, if other than denominations of \$1,000 and any integral multiple thereof;
- the portion of principal amount of the debt securities payable upon declaration of acceleration of the maturity date, if other than the principal amount;
- whether the debt securities are to be issued at any original issuance discount and the amount of discount with which such debt securities may be issued;
- whether the debt securities will be issued in the form of certificated debt securities or global debt securities and, in such case, the depository for such global security or securities and the terms and conditions, if any, upon which interests in such global security or securities may be exchanged in whole or in part for the individual securities represented thereby;
- provisions, if any, for the defeasance of the debt securities of a series in whole or in part and any addition or change in the provisions related to satisfaction and discharge;
- the form of the debt securities;
- the terms and conditions upon which the debt securities will be so convertible or exchangeable into securities or property of another person, if at all, and any additions or changes, if any, to permit or facilitate such conversion or exchange;
- whether the debt securities will be subject to subordination and the terms of such subordination;
- provisions, if any, granting special rights to holders of the debt securities upon the occurrence of specified events;
- any restriction or condition on the transferability of the debt securities;
- any addition or change in the provisions related to compensation and reimbursement of the trustee which applies to securities of such series;
- any addition to or change in the events of default described in this prospectus or in the indenture with respect to the debt securities and any change in the acceleration provisions described in this prospectus or in the indenture with respect to the debt securities;
- any addition to or change in the covenants described in this prospectus or in the indenture with respect to the debt securities; and
- any other terms of the debt securities, which may modify or delete any provision of the indenture.

We may issue debt securities that provide for an amount less than their stated principal amount to be due and payable upon declaration of acceleration of their maturity pursuant to the terms of the indenture. We will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms, if any, on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale; No Protection in Event of a Change of Control or Highly Leveraged Transaction

The indenture provides that we may not merge or consolidate with or into another entity, or sell other than for cash or lease all or substantially all our assets to another entity, or purchase all or substantially all the assets of another entity unless we are the surviving entity or, if we are not the surviving entity, the successor, transferee or lessee entity expressly assumes all of our obligations under the indenture or the debt securities, as appropriate.

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions that may afford holders of the debt securities additional protection in the event we have a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control), which could adversely affect holders of debt securities.

Events of Default Under the Indenture

The following are events of default under the indenture with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;
- if we fail to pay the principal, or premium, if any for 30 days, when due whether by maturity or called for redemption;
- if we fail to pay a sinking fund installment, if any, when due and our failure continues for 30 days;
- if we fail to observe or perform any other covenant relating to such series contained in the debt securities of such series or the indenture, other than a covenant specifically relating to and for the benefit of holders of another series of debt securities, and our failure continues for 90 days after we receive written notice from the debenture trustee or holders of not less than a majority in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur as to us.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of an event of default may constitute an event of default under any bank credit agreements we may have in existence from time to time. In addition, the occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

If an event of default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than a majority in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the debenture trustee if given by the holders), declare to be due and payable immediately the principal (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) of and premium and accrued and unpaid interest, if any, on all debt securities of that series. Before a judgment or decree for payment of the money due has been obtained with respect to debt securities of any series, the holders of a majority in principal amount of the outstanding debt securities of that series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) the acceleration shall be deemed to have been waived, rescinded and annulled if all events of default, other than the non-payment of accelerated principal, premium, if any, and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the applicable indenture (including payments or deposits in respect of principal, premium or interest that had become due other than as a result of such acceleration) and the Company has deposited with the indenture trustee or paying agent a sum sufficient to pay all amounts owed to the indenture trustee under the indenture, all arrears of interest, if any, on the debt securities, and the principal and premium, if any, on the debt securities that have become due other than by such acceleration. We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an event of default.

Subject to the terms of the indenture, if an event of default under the indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that, subject to the terms of the indenture, the debenture trustee need not take any action that it believes, upon the advice of counsel, might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will only have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies if:

- the holder previously has given written notice to the debenture trustee of a continuing event of default with respect to that series;
- the holders of at least a majority in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and
- the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series (or at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the applicable debenture trustee regarding our compliance with specified covenants in the applicable indenture.

Modification of Indenture; Waiver

The debenture trustee and we may, without the consent of any holders, execute a supplemental indenture to change the applicable indenture with respect to specific matters, including, among other things:

- to surrender any right or power conferred upon the Company;
- to provide, change or eliminate any restrictions on the payment of principal of or premium, if any, on the debt securities; provided that any such action shall not adversely affect the interests of the holders of debt securities of any series in any material respect;
- to change or eliminate any of the provisions of the indenture; provided that any such change or elimination shall become effective only when there is no outstanding debt security of any series created prior to the execution of such supplemental indenture that is entitled to the benefit of such provision and as to which such supplemental indenture would apply;
- to evidence the succession of another corporation to the Company;
- to evidence and provide for the acceptance of appointment by a successor trustee with respect to one or more series of debt securities and to add or change provisions of the indenture to facilitate the administration of the trusts thereunder by more than one trustee;
- to cure any ambiguity, mistake, manifest error, omission, defect or inconsistency in the indenture or to conform the text of any provision in the indenture or in any supplemental indenture to any description thereof in the applicable section of a prospectus, prospectus supplement or other offering document that was intended to be a verbatim recitation of a provision of the indenture or of any supplemental indenture;
- to add to or change or eliminate any provision of the indenture as shall be necessary or desirable in accordance with any amendments to the Trust Indenture Act;
- to make any change in any series of debt securities that does not adversely affect in any material respect the interests of the holders of such debt securities; and
- to supplement any of the provisions of the indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of debt securities; provided that any such action shall not adversely affect the interests of the holders of debt securities of such series or any other series of debt securities.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) that is affected. However, the debenture trustee and we may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption of any debt securities;
- reducing the principal amount of discount securities payable upon acceleration of maturity;
- making the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security;
- impairing the right to institute suit for the enforcement of any payment on or after the fixed maturity date of any series of debt securities;

- materially adversely affecting the economic terms of any right to convert or exchange any debt securities; and

- reducing the percentage of debt securities, the holders of which are required to consent to any amendment or waiver; or modifying, without the written consent of the trustee, the rights, duties or immunities of the trustee.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may, on behalf of the holders of all debt securities of that series, waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of the holders of all the debt securities of such series, waive any past default under the indenture with respect to that series and its consequences, other than a default in the payment of the principal of, premium or any interest on any debt security of that series; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Discharge

The indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities. In order to exercise our rights to be discharged with respect to a series, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, the premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indenture provides that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with a depository named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange or in the indenture, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice

of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under the indenture, undertakes to perform only those duties as are specifically set forth in the indenture. Upon an event of default under the indenture, the debenture trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

Unless we otherwise indicate in the applicable prospectus supplement, we will pay principal of and any premium and interest on the debt securities of a particular series at the office of the indenture trustee or, at the option of the Company, by wire or check payable to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the debenture trustee our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series. All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities will be governed and construed in accordance with the laws of the State of New York.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus.

General

We may issue warrants for the purchase of common stock, preferred stock or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and debt securities, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We may enter into a warrant agreement with a warrant agent. If we engage a warrant agent, each

warrant agent will be a bank that we select which has its principal office in the United States. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Additional Information

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- a discussion on any material or special United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5 p.m., Eastern time, on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. The applicable prospectus supplement may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units;
- the terms of the unit agreement governing the units;
- United States federal income tax considerations relevant to the units; and
- whether the units will be issued in fully registered global form.

This summary of certain general terms of units and any summary description of units in the applicable prospectus supplement do not purport to be complete and are qualified in their entirety by reference to all provisions of the applicable unit agreement and, if applicable, collateral arrangements and depositary arrangements relating to such units. The forms of the unit agreements and other documents relating to a particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you.

PLAN OF DISTRIBUTION

We may sell the securities through underwriters or dealers, through agents, or directly to one or more purchasers. The accompanying prospectus supplement will describe the terms of the offering of the securities, including:

- the name or names of any underwriters;
- the purchase price of the securities being offered and the proceeds we will receive from the sale;
- any over-allotment options pursuant to which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of the sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all the securities offered by the prospectus supplement. We may change from time to time the public offering price and any discounts or concessions allowed or reallocated or paid to dealers. We may use underwriters with whom we have a material relationship. We will describe such relationships in the prospectus supplement naming the underwriter and the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of the securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best efforts basis for the period of its appointment.

We may engage in "at the market" offerings of our common stock, which are offerings into an existing trading market, at other than a fixed price, on or through the facilities of a national securities exchange or to or through a market maker otherwise than on an exchange.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of common shares, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of common

shares. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the applicable prospectus supplement or a post-effective amendment to this registration statement.

Our common stock is listed on the New York Stock Exchange. All securities we offer other than common stock will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

Rules of the SEC may limit the ability of any underwriters to bid for or purchase securities before the distribution of the securities is completed. However, underwriters may engage in the following activities in accordance with the rules:

- Stabilizing transactions — Underwriters may make bids or purchases for the purpose of pegging, fixing or maintaining the price of the shares, so long as stabilizing bids do not exceed a specified maximum.
- Over-allotments and syndicate covering transactions — Underwriters may sell more shares of our common stock than the number of shares that they have committed to purchase in any underwritten offering. This over-allotment creates a short position for the underwriters. This short position may involve either “covered” short sales or “naked” short sales. Covered short sales are short sales made in an amount not greater than the underwriters’ over-allotment option to purchase additional shares in any underwritten offering. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing shares in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market, as compared to the price at which they may purchase shares through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the shares that could adversely affect investors who purchase shares in the offering.
- Penalty bids — If underwriters purchase shares in the open market in a stabilizing transaction or syndicate covering transaction, they may reclaim a selling concession from other underwriters and selling group members who sold those shares as part of the offering.

Similar to other purchase transactions, an underwriter’s purchases to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of the securities may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of shares if it discourages resales of the securities.

If commenced, the underwriters may discontinue any of the activities at any time.

**CERTAIN PROVISIONS OF NEW YORK LAW AND OF
THE COMPANY'S CHARTER AND BY-LAWS**

The following paragraphs summarize certain provisions of the New York Business Corporation Law, or NYBCL, and our Certificate of Incorporation, as amended, and our Amended and Restated By-laws. The summary does not purport to be complete and is subject to and qualified in its entirety by reference to the NYBCL and to our bylaws, copies of which are on file with the SEC as exhibits to the registration statement of which this prospectus forms a part. See "Where You Can Find More Information."

General. Certain provisions of our Certificate of Incorporation, as amended, and our Amended and Restated By-laws and New York law could make our acquisition by a third party, a change in our incumbent management, or a similar change of control more difficult, including:

- an acquisition of us by means of a tender or exchange offer;
- an acquisition of us by means of a proxy contest or otherwise; or
- the removal of a majority or all of our incumbent officers and directors.

These provisions, which are summarized below, are likely to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that these provisions help to protect our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us, and that this benefit outweighs the potential disadvantages of discouraging such a proposal because our ability to negotiate with the proponent could result in an improvement of the terms of the proposal.

Election and removal of directors. Our bylaws provide that the size of the board of directors shall be fixed at five (5) directors and shall be classified into three classes, as nearly equal as possible as determined by the board of directors. The directors are to be elected at the annual meeting of the stockholders, with a term expiring at the annual meeting of shareholders held in the third year following the year of their election or until his successor is elected and qualified. Any director or the entire board of directors may be removed, with cause, by a the affirmative vote of (i) the holders of 80% of the combined voting power of the then outstanding shares of stock entitled to vote generally in the election of directors, voting together as a single class and (ii) a majority of such shares beneficially owned by the persons not affiliated with an interested shareholder.

Stockholder meetings. Our bylaws provide that the stockholders may not call a special meeting of the stockholders of our company. Instead, special meetings of the stockholders may be called by the Board of Directors pursuant to a resolution approved by a majority of the entire board of directors.

Requirements for advance notification of stockholder nominations and proposals. Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board.

New York anti-takeover law. We are subject to certain "business combination" provisions of Section 912 of the NYBCL and expect to continue to be so subject if and for so long as we have a class of securities registered under Section 12 of the Securities Exchange Act of 1934. Section 912 provides, with certain exceptions (which include, among others, transactions with shareholders who became interested prior to the effective date of an amendment to our Certificate of Incorporation providing that we would be subject to Section 912 if such corporation did not then have a class of stock registered pursuant to Section 12 of the Exchange Act), that a New York corporation may not engage in a "business combination" (e.g., merger, consolidation, recapitalization or disposition of stock) with any "interested shareholder" for a period of five years from the date that such person first became an interested shareholder unless:

- (i) the transaction resulting in a person becoming an interested shareholder was approved by the board of directors of the corporation prior to that person becoming an interested shareholder; or

- (ii) the business combination is approved by the holders of a majority of the outstanding voting stock not beneficially owned by such interested shareholder; or
- (iii) the business combination is approved by the disinterested shareholders at a meeting called no earlier than five years after the interested shareholder's stock acquisition date; or
- (iv) the business combination meets certain valuation requirements for the stock of a New York corporation.

An "interested shareholder" is defined as any person who (a) is the beneficial owner of 20% or more of the outstanding voting stock of a New York corporation or (b) is an affiliate or associate of a corporation that at any time during the prior five years was the beneficial owner, directly or indirectly, of 20% or more of the then outstanding voting stock.

A "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested shareholder.

The "stock acquisition date", with respect to any person and any New York corporation, means the date that such person first becomes an interested shareholder of such corporation.

No cumulative voting. Our Certificate of Incorporation, as amended, and our Amended and Restated By-laws do not provide for cumulative voting in the election of directors.

Limitation of liability. As permitted by the NYBCL, our Certificate of Incorporation, as amended provides that a director will not be personally liable to us or our stockholders for damages for any breach of duty in his or her capacity as a director unless a judgment or other final adjudication adverse to such director establishes that (i) his or her acts or omissions were in bad faith or involved intentional misconduct or a knowing violation of law, (ii) such director personally gained in fact a financial profit or other advantage to which he or she was not legally entitled or (iii) his or her acts violated Section 719 of the NYBCL. As a result of this provision, we and our stockholders may be unable to obtain monetary damages from a director for breach of his or her duty of care.

Our Certificate of Incorporation, as amended, and our Amended and Restated By-laws also provide for the indemnification of our directors and officers to the fullest extent authorized by the NYBCL. Insofar as indemnification for liabilities under the Securities Act may be permitted to directors, officers or controlling persons of our company pursuant to our Certificate of Incorporation, as amended, our Amended and Restated By-laws and the NYBCL, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

We have the power to purchase and maintain insurance on behalf of any person who is or was one of our directors or officers, or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other business against any liability asserted against the person or incurred by the person in any of these capacities, or arising out of the person's fulfilling one of these capacities, and related expenses, whether or not we would have the power to indemnify the person against the claim under the provisions of the NYBCL. We intend to maintain director and officer liability insurance on behalf of our directors and officers.

LEGAL MATTERS

The validity of the issuance of the securities described herein has been passed upon for us by McDermott Will & Emery LLP, New York, New York. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Enzo Biochem, Inc. appearing in Enzo Biochem, Inc.'s Annual Report (Form 10-K) for the year ended July 31, 2012 (including the schedule appearing therein) and the effectiveness of Enzo Biochem, Inc.'s internal control over financial reporting as of July 31, 2012 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the document listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents deemed to be furnished and not filed in accordance with SEC rules) between the date of this prospectus and the termination of the offering and also between the date of the initial registration statement and prior to effectiveness of the registration statement:

- our Annual Report on Form 10-K for the fiscal year ended July 31, 2012 (including the information specifically incorporated by reference into our Annual Report on Form 10-K from our definitive proxy statement) filed with the SEC on October 15, 2012;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended October 31, 2012, January 31, 2013 and April 30, 2013 filed with the SEC on December 10, 2012, March 12, 2013 and June 10, 2013, respectively;
- our Current Reports on Form 8-K filed with the SEC on September 12, 2012, November 2, 2012, January 22, 2013, March 28, 2013, April 22, 2013 and June 12, 2013 (other than the information furnished pursuant to Item 2.02 thereof); and
- the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on December 8, 1999, including any amendment or report filed for the purpose of updating such description.

This prospectus is part of a registration statement on Form S-3 we have filed with the SEC under the Securities Act. This prospectus does not contain all of the information in the registration statement. We have omitted certain parts of the registration statement, as permitted by the rules and regulations of the SEC. You may inspect and copy the registration statement, including exhibits, at the SEC's public reference room or website. Our statements in this prospectus about the contents of any contract or other document are not necessarily complete. You should refer to the copy of each contract or other document we have filed as an exhibit to the registration statement for complete information.

You may request a copy of any or all of the information incorporated by reference, at no cost, by writing or telephoning us at the following address:

Enzo Biochem, Inc.
527 Madison Avenue
New York, New York 10022
(212) 583-0100

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our filings with the SEC are also available to the public at the SEC's website at <http://www.sec.gov>. You may also obtain copies of the documents at prescribed rates by writing to the SEC's Public Reference Section at 100 F Street, N.E., Washington, D.C. 20549. Our website is located at www.enzo.com. The contents of our website are not part of this prospectus and should not be relied upon with respect thereto.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS, SUBJECT TO COMPLETION, DATED AUGUST 1, 2013



ENZO BIOCHEM, INC.

**Up to \$18,000,000 of Shares
Common Stock**

In accordance with the terms of our existing sales agreement with Cantor Fitzgerald & Co., we may sell shares of our common stock from time to time through Cantor Fitzgerald & Co., acting as agent pursuant to this prospectus. This prospectus relates to the shares of common stock having an aggregate offering price of up to \$18,000,000 that are available for issuance as of July 19, 2013, under our existing sales agreement.

Our common stock is listed on The New York Stock Exchange under the symbol "ENZ". On July 29, 2013, the last reported sale price of our common stock on The New York Stock Exchange was \$2.14 per share.

Sales of our common stock, if any, under this prospectus may be made in sales deemed to be "at-the-market" equity offerings as defined in Rule 415 promulgated under the Securities Act of 1933, as amended (Securities Act), including sales made directly on or through The New York Stock Exchange, the existing trading market for our common stock, sales made to or through a market maker other than on an exchange or otherwise, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, and/or any other method permitted by law, including in privately negotiated transactions. Cantor Fitzgerald & Co. will act as sales agent on a best efforts basis and use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between Cantor Fitzgerald & Co. and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Cantor Fitzgerald & Co. will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price per share sold. In connection with the sale of our common stock on our behalf, Cantor Fitzgerald & Co. will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cantor Fitzgerald & Co. will be deemed to be underwriting commissions or discounts.

Investing in our securities involves a high degree of risk. Before making an investment decision, please read "Risk Factors" beginning on page ATM-4 of this prospectus and in the documents incorporated by reference into this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.



The date of this prospectus is , 2013.

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ABOUT THIS PROSPECTUS

This prospectus is part of a “shelf” registration statement on Form S-3 that we filed with the Securities and Exchange Commission (SEC).

You should read this prospectus, the documents incorporated by reference in this prospectus and any free writing prospectus that we have authorized for use in connection with this offering before making an investment decision. You should also read and consider the information in the documents referred to in the sections of this prospectus entitled “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.”

You should rely only on the information contained or incorporated by reference in this prospectus and any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it.

We are not making an offer to sell the securities covered by this prospectus in any jurisdiction where the offer or sale is not permitted.

The information appearing in this prospectus, the documents incorporated by reference in this prospectus and any free writing prospectus that we have authorized for use in connection with this offering is accurate only as of its respective date, regardless of the time of delivery of the respective document or of any sale of securities covered by this prospectus. You should not assume that the information contained in or incorporated by reference in this prospectus, or in any free writing prospectus that we have authorized for use in connection with this offering, is accurate as of any date other than the respective dates thereof. Any statement made in this prospectus or in any document incorporated by reference herein will be deemed to be modified or superseded to the extent that a statement in this prospectus or in any other subsequently filed document that is also incorporated by reference in this prospectus modifies or supersedes that statement.

In this prospectus, the terms “Enzo Biochem,” “Enzo,” “Company,” “we,” “us,” “our” and similar terms refer to Enzo Biochem, Inc., a New York corporation, unless the context otherwise requires.

PROSPECTUS SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in the securities covered by this prospectus. For a more complete understanding of Enzo Biochem and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus, including the information incorporated by reference in this prospectus and the information included in any free writing prospectus that we have authorized for use in connection with this offering, including the information referred to under the heading "Risk Factors" in this prospectus beginning on page ATM-4.

The Company

We are a growth-oriented integrated life sciences and biotechnology company focused on harnessing biological processes to develop research tools, diagnostics and therapeutics and serve as a provider of test services, including esoteric tests, to the medical community. Since our founding in 1976, our strategic focus has been on the development of enabling technologies in research, development, manufacture, licensing and marketing of innovative health care products, platforms and services based on molecular and cellular technologies. Our pioneering work in genomic analysis coupled with our extensive patent estate and enabling platforms have strategically positioned the Company to play an important role in the rapidly growing life sciences and molecular medicine marketplaces.

In the course of our research and development activities, we have built a substantial portfolio of intellectual property assets, comprising 114 key issued patents worldwide, and over 250 pending patent applications, along with extensive enabling technologies and platforms.

We are comprised of three operating segments, of which the Therapeutics and Life Sciences segments have evolved out of our core competencies: the use of nucleic acids as informational molecules and the use of compounds for immune modulation and augmented by the acquisition of a number of related companies.

Below are brief descriptions of each of our operating segments:

Enzo Clinical Labs is a regional clinical laboratory serving the New York, New Jersey and Eastern Pennsylvania medical communities. The Company believes having clinical diagnostic services allows us to capitalize first hand on our extensive advanced molecular and cytogenetic capabilities and the broader trends in predictive and personalized diagnostics. Enzo Clinical Labs offers a menu of routine and esoteric clinical laboratory tests or procedures used in general patient care by physicians to establish or support a diagnosis, monitor treatment or medication, and search for an otherwise undiagnosed condition. We operate a full-service clinical laboratory in Farmingdale, New York, a network of over 30 patient service centers throughout New York and New Jersey, a stand-alone "stat" or rapid response laboratory in New York City and a full-service phlebotomy and in-house logistics department.

Enzo Life Sciences manufactures, develops and markets products and tools to life sciences, drug development and clinical research customers world-wide and has amassed a large patent and technology portfolio. Enzo Life Sciences, Inc. is a recognized leader in labeling and detection technologies across research and diagnostic markets. Our strong portfolio of proteins, antibodies, peptides, small molecules, labeling probes, dyes and kits provides life science researchers tools for target identification/validation, high content analysis, gene expression analysis, nucleic acid detection, protein biochemistry and detection, and cellular analysis. We are internationally recognized and acknowledged as a leader in manufacturing, in-licensing, and commercialization of over 7,500 of our own products and in addition distribute over 30,000 products made by over 40 other original manufacturers. Our strategic focus is directed to innovative high quality research reagents and kits in the primary key research areas of genomics, cellular analysis, small molecule chemistry, protein homeostasis epigenetics immunoassays and assay development.

The segment is an established source for a comprehensive panel of products to scientific experts in the fields of cancer, cardiovascular disease, neurological disorders, diabetes and obesity, endocrine disorders, infectious and autoimmune disease, hepatotoxicity and renal injury.

Enzo Therapeutics is a biopharmaceutical venture that has developed multiple novel approaches in the areas of gastrointestinal, infectious, ophthalmic and metabolic diseases, many of which are derived from the pioneering work of Enzo Life Sciences. Enzo Therapeutics has focused its efforts on developing treatment regimens for diseases and conditions for which current treatment options are ineffective, costly, and/or cause unwanted side effects. This focus has generated a clinical and preclinical pipeline, as well as more than 45 patents and patent applications.

Our primary sources of revenue have historically been from product revenues and royalty and licensing of Enzo Life Sciences' products utilized in life science research and from the clinical laboratory services provided to the healthcare community.

Corporate Information

Our offices are located at 527 Madison Avenue, New York, New York 10022, and our telephone number is (212) 583-0100. We maintain a website at www.enzo.com. Our website and the information contained therein or connected thereto are not incorporated by reference and are not a part of this prospectus.

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THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$18,000,000.
Common stock to be outstanding immediately after this offering	Up to 48,956,000 shares (as more fully described in the notes following this table), assuming sales of 8,411,000 shares of our common stock in this offering at an offering price of \$2.14 per share, which was the last reported sale price of our common stock on The New York Stock Exchange on July 29, 2013. The actual number of shares issued will vary depending on the sales price under this offering.
Manner of offering	“At-the-market” offering that may be made from time to time through our sales agent, Cantor Fitzgerald & Co. See “Plan of Distribution” on page ATM-10 of this prospectus.
Use of proceeds	We currently intend to use the net proceeds from this offering, if any, for general corporate purposes, including research and development activities, capital expenditures and working capital. See “Use of Proceeds” on page ATM-8 of this prospectus.
New York Stock Exchange symbol	“ENZ”
Risk factors	Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page ATM-4 of this prospectus.

The number of shares of our common stock shown above to be outstanding immediately after this offering is based on 40,545,000 shares outstanding as of June 30, 2013 and excludes as of such date:

- 727,000 shares of our common stock subject to outstanding options having a weighted average exercise price of \$10.39 per share and 127,000 shares of unvested restricted stock awards outstanding, as of June 30, 2013; and
- 2,320,000 shares of our common stock reserved for future issuance pursuant to our existing stock incentive plan.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before purchasing our common stock, you should carefully consider the following risk factors as well as those discussed under the section entitled "Risk Factors" in our Annual Report on Form 10-K for the year ended July 31, 2012, and any subsequent Quarterly Report on Form 10-Q or Annual Report on Form 10-K, together with the other information contained in this prospectus, the documents incorporated by reference and in any free writing prospectus we have authorized for use in connection with this offering. Each of these risk factors, either alone or taken together, could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our common stock. There may be additional risks that we do not presently know of or that we currently believe are immaterial which could also impair our business and financial position. If any of the events described below were to occur, our financial condition, our ability to access capital resources, our results of operations and/or our future growth prospects could be materially and adversely affected and the market price of our common stock could decline. As a result you could lose some or all of any investment you may have made or may make in our common stock.

Risks Related to this Offering and our Common Stock

Our stock price may be volatile, and our stockholders' investment in our stock could decline in value.

The market prices for our securities and those of other life science and biotechnology companies have been highly volatile and may continue to be highly volatile in the future. The following factors, in addition to other risk factors described in this section and the documents incorporated by reference, may have a significant impact on the market price of our common stock:

- the receipt or failure to receive the additional capital necessary to conduct our business and the terms on which any additional capital is received;
- the progress and success of preclinical studies and clinical trials of our product candidates conducted by us or our future collaborative partners or licensees, if any;
- selling by large stockholders;
- announcements of technological innovations or new commercial products by our competitors or us;
- failure of our products to achieve or maintain market acceptance or commercial success;
- changes in our pricing policies or the pricing policies of our competitors;
- recruitment or departure of key personnel;
- developments concerning proprietary rights, including patents;
- developments concerning any future collaborations;
- publicity regarding actual or potential medical results relating to products under development by our competitors or us;
- regulatory developments in the United States and foreign countries;
- litigation;
- general economic and market conditions both in the United States and worldwide;

- other external factors or other disaster or crisis; and
- fluctuations in our quarterly operating results or in the operating results of our competitors.

In addition, the stock markets in general, The New York Stock Exchange and the market for life science and biotechnology companies, in particular, may experience a loss of investor confidence. Such loss of investor confidence may result in extreme price and volume fluctuations in our common stock that are unrelated or disproportionate to the operating performance of our business, financial condition or results of operations. These broad market and industry factors may materially harm the market price of our common stock and expose us to securities class action litigation. Such litigation, even if unsuccessful, could be costly to defend and divert management's attention and resources, which could further materially harm our financial condition and results of operations.

We do not intend to pay dividends on our common stock for the foreseeable future.

We do not expect for the foreseeable future to pay dividends on our common stock. Any future determination to pay dividends on or repurchase shares of our common stock will be at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions and applicable law.

Investors in this offering will experience immediate and substantial dilution in the net tangible book value per share of the common stock they purchase.

Since the price per share of our common stock being offered is higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. See the section entitled "Dilution" in this prospectus for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering. In addition, we have a significant number of options outstanding. As of June 30, 2013, 2,320,000 shares of common stock were reserved for future issuance under our stock incentive plan. As of that date, there were also 727,000 options to purchase shares of our common stock and 127,000 shares of unvested restricted stock awards outstanding. The exercise of outstanding options and warrants having an exercise price per share that is less than the offering price per share in this offering will increase dilution to investors in this offering.

Future sales of shares of our common stock or the issuance of securities senior to our common stock could adversely affect the trading price of our common stock and our ability to raise funds in new equity offerings.

We are not restricted from issuing additional common stock, preferred stock or securities convertible into or exchangeable for common stock. Future sales of a substantial number of our shares of common stock or equity-related securities in the public market or privately, or the perception that such sales could occur, could adversely affect prevailing trading prices of our common stock, and could impair our ability to raise capital through future offerings of equity or equity-related securities. No prediction can be made as to the effect, if any, that future sales of shares of common stock or the availability of shares of common stock for future sale will have on the trading price of our common stock. You may experience significant dilution as a result of future equity offerings.

We have broad discretion in the use of the net proceeds from this offering.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways with which you may not agree. Accordingly, you will be relying on the judgment of our management with regard to the use of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that the net proceeds will be invested or otherwise used in a way that does not yield a favorable, or any, return for the Company.

Adverse capital and credit market conditions could affect our liquidity.

Adverse capital and credit market conditions could affect our ability to meet liquidity needs, as well as our access to capital and cost of capital. The capital and credit markets have experienced extreme volatility and disruption in recent years. Our results of operations, financial condition, cash flows and capital position could be materially adversely affected by continued disruptions in the capital and credit markets.

It may be difficult for a third party to acquire us, which could inhibit stockholders from realizing a premium on their stock price.

We are subject to the New York anti-takeover laws regulating corporate takeovers. These anti-takeover laws prohibit certain business combinations between a New York corporation and any “interested shareholder” (generally, the beneficial owner of 20% or more of the corporation’s voting shares) for five years following the time that the shareholder became an interested shareholder, unless the corporation’s board of directors approved the transaction prior to the interested shareholder becoming interested.

Our certificate of incorporation, as amended, and by-laws contain provisions that could have the effect of delaying, deferring or preventing a change in control of us that stockholders may consider favorable or beneficial. These provisions could discourage proxy contests and make it more difficult for stockholders to elect directors and take other corporate actions. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock. These provisions include:

- a staggered board of directors, so that it would take three successive annual meetings to replace all directors; and
- advance notice requirements for the submission by stockholders of nominations for election to the board of directors and for proposing matters that can be acted upon by stockholders at a meeting.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, the documents we have filed with the SEC that are incorporated herein and therein by reference and any related free writing prospectus may contain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance or achievement to be materially different from any future results, levels of activity, performance or achievements expressed or implied by the forward- looking statements.

In some cases, you can identify forward-looking statements by terms such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” and similar expressions intended to identify forward-looking statements. While we believe that we have a reasonable basis for each forward-looking statement, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. We discuss many of these risks, uncertainties and other factors in greater detail under the heading “Risk Factors” contained in this prospectus. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should read carefully this prospectus, together with the information incorporated herein by reference as described under the heading “Where You Can Find More Information” in this prospectus, completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify all of our forward- looking statements by these cautionary statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

USE OF PROCEEDS

We currently intend to use the net proceeds from this offering, if any, for general corporate purposes, including research and development activities, capital expenditures and working capital. Pending the application of the net proceeds, we intend to invest the net proceeds in short-term, investment grade, interest-bearing securities or cash equivalents.

As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering, if any. As a result, our management will have broad discretion regarding the timing and application of the net proceeds from this offering, if any.

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DILUTION

If you invest in our common stock, you will experience dilution to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value as of April 30, 2013 was approximately \$17,600,000, or \$0.44 per share of our common stock. Net tangible book value per share as of April 30, 2013 is equal to our total tangible assets minus total liabilities, all divided by the number of shares of common stock outstanding as of April 30, 2013.

After giving effect to the sale of our common stock in the aggregate amount of \$18,000,000 in this offering at an assumed offering price of \$2.14 per share, representing the last reported sale price of our common stock on The New York Stock Exchange on July 29, 2013, and after deducting estimated offering commissions and expenses payable by us, our as adjusted net tangible book value would have been approximately \$34,884,000, or approximately \$0.73 per share of common stock, as of April 30, 2013. This represents an immediate increase in net tangible book value of approximately \$1.70 per share to existing stockholders and an immediate dilution of approximately \$1.41 per share to investors in this offering. The following table illustrates this calculation on a per share basis.

Assumed public offering price per share		\$	2.14
Net tangible book value per share as of April 30, 2013		\$	0.44
Increase in net tangible book value per share attributable to this offering		\$	<u>1.70</u>
As adjusted net tangible book value per share as of April 30, 2013, after giving effect to this offering		\$	<u>0.73</u>
Dilution per share to new investors purchasing shares in this offering		\$	<u><u>1.41</u></u>

The table above assumes for illustrative purposes that an aggregate of 8,411,000 shares of our common stock are sold at a price of \$2.14 per share, representing the last reported sale price of our common stock on The New York Stock Exchange on July 29, 2013, for aggregate gross proceeds of \$18,000,000. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$0.21 per share in the price at which the shares are sold from the assumed offering price of \$2.14 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$18,000,000 is sold at that price, would increase our adjusted net tangible book value per share after the offering to \$0.74 per share and would increase the dilution in net tangible book value per share to new investors in this offering to \$1.62 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$0.21 per share in the price at which the shares are sold from the assumed offering price of \$2.14 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$18,000,000 is sold at that price, would decrease our adjusted net tangible book value per share after the offering to \$0.71 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to \$1.21 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

The above illustration of dilution per share to investors participating in this offering assumes no exercise of outstanding options to purchase our common stock. The exercise of outstanding options having an exercise price per share that is less than the offering price per share in this offering will increase dilution to investors in this offering.

PLAN OF DISTRIBUTION

In accordance with the terms of our existing Controlled Equity OfferingSM sales agreement with Cantor Fitzgerald & Co., we may sell shares of our common stock from time to time through Cantor Fitzgerald & Co., acting as agent pursuant to this prospectus. This prospectus relates to the shares of common stock having an aggregate offering price of up to \$18,000,000 that are available for issuance as of July 19, 2013, under our existing sales agreement. The sales agreement was filed as an exhibit to a current report on Form 8-K filed with the SEC on March 28, 2013 and incorporated by reference in this prospectus.

Upon delivery of a placement notice and subject to the terms and conditions of the sales agreement, Cantor may sell our common stock by any method permitted by law deemed to be an "at-the-market" offering as defined in Rule 415 promulgated under the Securities Act, including sales made directly on The New York Stock Exchange, on any other existing trading market for our common stock or to or through a market maker. Cantor may also sell our common stock by any other method permitted by law, including in privately negotiated transactions. We may instruct Cantor not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Cantor may suspend the offering of common stock upon notice and subject to other conditions.

We will pay Cantor commissions, in cash, for its services in acting as agent in the sale of our common stock. Cantor will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price per share sold. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have reimbursed Cantor for certain specified expenses, including the fees and disbursements of its legal counsel in an amount of approximately \$50,000. We estimate that the total expenses for the offering, excluding the aforementioned compensation and reimbursements payable to Cantor under the terms of the sales agreement will be approximately \$130,000.

Settlement for sales of common stock will occur on the third business day following the date on which any sales are made, or on some other date that is agreed upon by us and Cantor in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Cantor may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Cantor will use its commercially reasonable efforts, consistent with its normal trading and sales practices, to solicit offers to purchase the common stock shares under the terms and subject to the conditions set forth in the sales agreement. In connection with the sale of the common stock on our behalf, Cantor will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cantor will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Cantor against certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all shares of our common stock subject to the sales agreement or (ii) termination of the sales agreement as permitted therein. We and Cantor may each terminate the sales agreement at any time upon ten days prior notice.

Cantor and its affiliates may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, Cantor will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus.

Pursuant to an agreement with Cantor, Trout Capital LLC will be entitled to receive compensation from Cantor of up to 10.0% of the net discount and fees paid to Cantor in accordance with the terms of the sales agreement. Although Trout Capital LLC, a member of the Financial Industry Regulatory Authority (FINRA), is not offering or selling common stock on our behalf pursuant to this prospectus, the fee received by Trout Capital LLC pursuant to the agreement may be deemed by FINRA to be compensation received by a FINRA member in connection with the offering. Outside of the aforementioned agreement with Cantor, Trout Capital LLC has no other relationship with Cantor.

This prospectus in electronic format may be made available on a website maintained by Cantor and Cantor may distribute this prospectus electronically.

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LEGAL MATTERS

Certain legal matters in connection with the securities offered hereby will be passed upon for us by McDermott Will & Emery LLP, New York, New York. Cantor is being represented in connection with this offering by Reed Smith LLP, New York, New York.

EXPERTS

The consolidated financial statements of Enzo Biochem, Inc. appearing in Enzo Biochem, Inc.'s Annual Report (Form 10-K) for the year ended July 31, 2012 (including the schedule appearing therein), and the effectiveness of Enzo Biochem, Inc.'s internal control over financial reporting as of July 31, 2012, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such financial statements and the effectiveness of our internal control over financial reporting as of the respective dates given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3, of which this prospectus is a part, under the Securities Act, to register the shares of common stock offered by this prospectus. However, this prospectus does not contain all of the information contained in the registration statement and the exhibits and schedules to the registration statement. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified in their entirety by reference to those filings. We encourage you to carefully read the registration statement and the exhibits and schedules to the registration statement.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our filings with the SEC are also available to the public at the SEC's website at <http://www.sec.gov>. You may also obtain copies of the documents at prescribed rates by writing to the SEC's Public Reference Section at 100 F Street, N.E., Washington, D.C. 20549. Our website is located at www.enzo.com. The contents of our website are not part of this prospectus and should not be relied upon with respect thereto.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

SEC rules allow us to “incorporate by reference” into this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference into this prospectus is considered to be part of this prospectus.

This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents deemed to be furnished and not filed in accordance with SEC rules) until the offering of the securities contemplated by this prospectus is terminated or completed:

- our Annual Report on Form 10-K for the fiscal year ended July 31, 2012 (including the information specifically incorporated by reference into our Annual Report on Form 10-K from our definitive proxy statement) filed with the SEC on October 15, 2012;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended October 31, 2012 and January 31, 2013 and April 30, 2013 filed with the SEC on December 10, 2012, March 12, 2013 and June 10, 2013, respectively;
- our Current Reports on Form 8-K filed with the SEC on September 12, 2012, November 2, 2012, January 22, 2013, March 28, 2013, April 22, 2013 and June 12, 2013 (other than the information furnished pursuant to Item 2.02 thereof); and
- the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on December 8, 1999, including any amendment or report filed for the purpose of updating such description.

Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and later information filed with the SEC may update and supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded.

We will provide without charge to each person, including any beneficial owners, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus but not delivered with this prospectus. You may request a copy of these documents by writing or telephoning us at the following address:

Enzo Biochem, Inc.
527 Madison Avenue
New York, New York 10022
(212) 583-0100

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ENZO BIOCHEM, INC.

Up to \$18,000,000 of Shares

Common Stock

PROSPECTUS

The date of this prospectus is _____, 2013



PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Distribution

The following table lists the costs and expenses payable by the registrant in connection with the sale of the common stock covered by this prospectus other than any sales commissions or discounts, which expenses will be paid by us. All amounts shown are estimates except the SEC registration fee.

SEC registration fee	\$ 6,820
FINRA filing fee	\$ 8,000
Legal fees and expenses	\$ 75,000
Accounting fees and expenses	\$ 35,000
Printing fees and expenses	\$ 5,180
Total	<u>\$ 130,000</u>

Item 15. Indemnification of Directors and Officers

Enzo Biochem, Inc. is incorporated under the laws of the State of New York. Reference is made to Section 721 of the NYBCL, which enables a corporation in its original certificate of incorporation or an amendment thereto to eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except if (1) his or her acts or omissions were in bad faith or involved intentional misconduct or a knowing violation of law or (2) such director personally gained in fact a financial profit or other advantage to which or she was not legally entitled.

Reference is also made to Section 722 of the NYBCL, which provides that a corporation may indemnify any person, including an officer or director, who is, or is threatened to be made, party to any threatened, pending or completed legal action or proceeding, whether civil or criminal, other than an action by or in the right of such corporation, by reason of the fact that such person was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that his conduct was unlawful. A New York corporation may indemnify any officer or director in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses that such officer or director actually and reasonably incurred.

Article 8 of the Company's Certificate of Incorporation, as amended, provides that the Company shall, to the fullest extent permitted by the provisions of Article 7 of the NYBCL, as the same may be amended and supplemented, indemnify any and all persons whom it shall have power to indemnify under said section from and against any and all of the expenses, liabilities or other matters referred to in or covered by said section, and the indemnification provided for therein shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such person.

Liability Insurance

We have also obtained directors' and officers' liability insurance, which insures against liabilities that our directors or officers may incur in such capacities.

Item 16. Exhibits and Financial Statement Schedules.

(a) *Exhibits.* The following exhibits are included herein or incorporated herein by reference.

<u>Exhibit Number</u>	
1.1*	Form of Underwriting Agreement
1.2	Controlled Equity Offering SM Sales Agreement, dated March 28, 2013, between Enzo Biochem, Inc. and Cantor Fitzgerald & Co. (incorporated by reference to Exhibit 1.1 to the Current Report on Form 8-K of Enzo Biochem, Inc. filed with the SEC on March 28, 2013)
4.1	Common Stock Specimen Certificate (incorporated by reference to Exhibit 4.6 to the registration statement on Form S-8 of Enzo Biochem, Inc. (No. 333-123712))
4.2*	Form of Certificate of Designations of Preferred Stock
4.3	Form of Indenture between Enzo Biochem, Inc. and one or more trustees to be named
4.4*	Form of Note
4.5*	Form of Common Stock Warrant Agreement and Warrant Certificate
4.6*	Form of Preferred Stock Warrant Agreement and Warrant Certificate
4.7*	Form of Debt Securities Warrant Agreement and Warrant Certificate
4.8*	Form of Deposit Agreement
4.9*	Form of Unit Agreement
5.1	Opinion of McDermott Will & Emery LLP, counsel to the registrant
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of McDermott Will & Emery LLP (contained in Exhibit 5.1)
24.1	Power of attorney (contained on page II-5)
25.1†	Form T-1 Statement of Eligibility of Trustee

* To be filed by amendment or by a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, if applicable.

† To be filed separately under electronic form type 305B2, if applicable.

(b) *Financial Statement Schedules.* - None

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment, any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933, shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will,

as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of section 310 of the Trust Indenture Act ("Act") in accordance with the rules and regulations prescribed by the Commission under section 305(b)(2) of the Act.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on this 1st day of August, 2013.

ENZO BIOCHEM, INC.

By: /s/ Elazar Rabbani _____

Name: Elazar Rabbani, Ph.D.

Title: Chairman, Chief Executive Officer and Secretary
(Principal Executive Officer)

By: /s/ Barry W. Weiner _____

Name: Barry W. Weiner

Title: President, Chief Financial Officer, Treasurer and Director
(Principal Financial and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Elazar Rabbani and Barry W. Weiner, and each or either of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

/s/ Elazar Rabbani, Ph.D. Elazar Rabbani, Ph.D.	Chairman, Chief Executive Officer and Secretary (Principal Executive Officer)	August 1, 2013
/s/ Barry W. Weiner Barry W. Weiner	President, Chief Financial Officer, Treasurer and Director (Principal Financial and Accounting Officer)	August 1, 2013
Bernard L. Kasten M.D.	Director	August 1, 2013
/s/ Dov Perlysky Dov Perlysky	Director	August 1, 2013
/s/ Gregory Bortz Gregory Bortz	Director	August 1, 2013

EXHIBIT INDEX

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* To be filed by amendment or by a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, if applicable.

† To be filed separately under electronic form type 305B2, if applicable.

ENZO BIOCHEM, INC.

INDENTURE

Dated as of

_____, 20__

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ENZO BIOCHEM, INC.

INDENTURE

Dated as of

_____, 20__

DEBT SECURITIES

Trustee

INDENTURE dated as of _____, 20__, among Enzo Biochem, Inc., a Delaware corporation (the “**Company**”), and _____, as trustee (the “**Trustee**”).

WITNESSETH:

WHEREAS, the Company has duly authorized the execution and delivery of this Indenture to provide for the issuance of debentures, notes, bonds or other evidences of indebtedness (the “**Securities**”) in an unlimited aggregate principal amount to be issued from time to time in one or more series as provided in this Indenture; and

WHEREAS, all things necessary to make this Indenture a valid and legally binding agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That, in consideration of the premises and the purchase of the Securities by the Holders thereof for the equal and proportionate benefit of all of the present and future Holders of the Securities, each party agrees and covenants as follows:

ARTICLE I

DEFINITIONS

For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

(a) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;

(b) all terms used herein without definition which are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein; and

(c) the words “herein”, “hereof” and “hereunder” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

(d) References to “Article” or “Section” or other subdivision herein are references to an Article, Section or other subdivision of the Indenture, unless the context otherwise requires.

Section 1.01. Definitions.

(a) Unless otherwise defined in this Indenture or the context otherwise requires, all terms used herein shall have the meanings assigned to them in the Trust Indenture Act.

(b) Unless the context otherwise requires, the terms defined in this Section 1.01(b) shall for all purposes of this Indenture have the meanings hereinafter set forth, the following definitions to be equally applicable to both the singular and the plural forms of any of the terms herein defined:

Affiliate: The term “Affiliate,” with respect to any specified Person shall mean any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, “control” when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

Authenticating Agent: The term “Authenticating Agent” shall have the meaning assigned to it in Section 11.09.

Board of Directors: The term “Board of Directors” shall mean either the board of directors of the Company or the executive or any other committee of that board duly authorized to act in respect hereof.

Board Resolution: The term “Board Resolution” shall mean a copy of a resolution or resolutions certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors (or by a committee of the Board of Directors to the extent that any such other committee has been authorized by the Board of Directors to establish or approve the matters contemplated) and to be in full force and effect on the date of such certification and delivered to the Trustee.

Business Day: The term “Business Day,” when used with respect to any Place of Payment or any other particular location referred to in this Indenture or in the Securities, shall mean each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in that Place of Payment or other location are authorized or obligated by law or executive order to close.

Capital Stock: The term “Capital Stock” shall mean:

- (a) in the case of a corporation, corporate stock;
- (b) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;
- (c) in the case of a partnership or limited liability company, partnership interests (whether general or limited) or membership interests; and
- (d) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person, but excluding from all of the foregoing any debt securities convertible into Capital Stock, whether or not such debt securities include any right of participation with Capital Stock.

Code: The term “Code” shall mean the Internal Revenue Code of 1986 as in effect on the date hereof.

Company: The term “Company” shall mean the Person named as the “Company” in the first paragraph of this Indenture until a successor Person shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Company” shall mean such successor Person.

Company Order: The term “Company Order” shall mean a written order signed in the name of the Company by the Chairman, Chief Executive Officer, President, Chief Financial Officer, any Vice President, Treasurer, any Assistant Treasurer, Controller, Secretary or any Assistant Secretary of the Company, and delivered to the Trustee.

Corporate Trust Office: The term “Corporate Trust Office,” or other similar term, shall mean the principal office of the Trustee at which at any particular time its corporate trust business shall be administered, which office at the date hereof is located at _____, or such other address as the Trustee may designate from time to time by notice to the Holders and the Company, or the principal corporate trust officer of any successor Trustee (or such other address as such successor Trustee may designate from time to time by notice to the Holders and the Company).

Currency: The term “Currency” shall mean U.S. Dollars or Foreign Currency.

Default: The term “Default” shall have the meaning assigned to it in Section 11.03.

Defaulted Interest: The term “Defaulted Interest” shall have the same meaning assigned to it in Section 3.08(b).

Depository: The term “Depository” shall mean, with respect to the Securities of any series issuable in whole or in part in the form of one or more Global Securities, the Person designated as Depository by the Company pursuant to Section 3.01 until a successor Depository shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Depository” shall mean or include each Person who is then a Depository hereunder, and if at any time there is more than one such Person, “Depository” as used with respect to the Securities of any such series shall mean the Depository with respect to the Securities of that series.

Designated Currency: The term “Designated Currency” shall have the same meaning assigned to it in Section 3.12.

Discharged: The term “Discharged” shall have the meaning assigned to it in Section 12.03.

Event of Default: The term “Event of Default” shall have the meaning specified in Section 7.01.

Exchange Act: The term “Exchange Act” shall mean the Securities Exchange Act of 1934, as amended.

Exchange Rate: The term “Exchange Rate” shall have the meaning assigned to it in Section 7.01.

Floating Rate Security: The term “Floating Rate Security” shall mean a Security that provides for the payment of interest at a variable rate determined periodically by reference to an interest rate index specified pursuant to Section 3.01.

Foreign Currency: The term “Foreign Currency” shall mean a currency issued by the government of any country other than the United States or a composite currency, the value of which is determined by reference to the values of the currencies of any group of countries.

GAAP: The term “GAAP,” with respect to any computation required or permitted hereunder, shall mean generally accepted accounting principles in the United States as in effect from time to time, including, without limitation, those set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as approved by a significant segment of the accounting profession.

Global Security: The term “Global Security” shall mean any Security that evidences all or part of a series of Securities, issued in fully-registered certificated form to the Depository for such series in accordance with Section 3.03 and bearing the legend prescribed in Section 3.03(g).

Holder; Holder of Securities: The terms “Holder” and “Holder of Securities” are defined under “Security holder; Holder of Securities; Holder.”

Indebtedness: The term “Indebtedness” shall mean any and all obligations of a Person for money borrowed which, in accordance with GAAP, would be reflected on the balance sheet of such Person as a liability on the date as of which Indebtedness is to be determined.

Indenture: The term “Indenture” or “this Indenture” shall mean this instrument and all indentures supplemental hereto.

Interest: The term “interest” shall mean, with respect to an Original Issue Discount Security that by its terms bears interest only after Maturity, interest payable after Maturity.

Interest Payment Date: The term “Interest Payment Date” shall mean, with respect to any Security, the Stated Maturity of an installment of interest on such Security.

Mandatory Sinking Fund Payment: The term “Mandatory Sinking Fund Payment” shall have the meaning assigned to it in Section 5.01.

Maturity: The term “Maturity,” with respect to any Security, shall mean the date on which the principal of such Security shall become due and payable as therein and herein provided, whether by declaration, call for redemption or otherwise.

Members: The term “Members” shall have the meaning assigned to it in Section 3.03(i).

Officer’s Certificate: The term “Officer’s Certificate” shall mean a certificate signed by any of the Chairman of the Board of Directors, Chief Executive Officer, President, Chief Financial Officer, any Vice President, Treasurer, any Assistant Treasurer, Controller, Secretary or any Assistant Secretary of the Company and delivered to the Trustee. Each such certificate shall include the statements provided for in Section 16.01 if and to the extent required by the provisions of such Section.

Opinion of Counsel: The term “Opinion of Counsel” shall mean an opinion in writing signed by legal counsel, who may be an employee of or of counsel to the Company, or may be other counsel that meets the requirements provided for in Section 16.01.

Optional Sinking Fund Payment: The term “Optional Sinking Fund Payment” shall have the meaning assigned to it in Section 5.01.

Original Issue Discount Security: The term “Original Issue Discount Security” shall mean any Security that is issued with “original issue discount” within the meaning of Section 1273(a) of the Code and the regulations thereunder and any other Security designated by the Company as issued with original issue discount for United States federal income tax purposes.

Outstanding: The term “Outstanding,” when used with respect to Securities means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, except:

(a) Securities theretofore canceled by the Trustee or delivered to the Trustee for cancellation;

(b) Securities or portions thereof for which payment or redemption money in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent (other than the Company) in trust or set aside and segregated in trust by the Company (if the Company shall act as its own Paying Agent) for the Holders of such Securities or Securities as to which the Company’s obligations have been Discharged; provided, however, that if such Securities or portions thereof are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made; and

(c) Securities that have been paid pursuant to Section 3.07(b) or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to a Responsible Officer of the Trustee proof

satisfactory to it that such Securities are held by a protected purchaser in whose hands such Securities are valid obligations of the Company; provided, however, that in determining whether the Holders of the requisite principal amount of Securities of a series Outstanding have performed any action hereunder, Securities owned by the Company or any other obligor upon the Securities of such series or any Affiliate of the Company or of such other obligor shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such action, only Securities of such series that a Responsible Officer of the Trustee actually knows to be so owned shall be so disregarded. Securities so owned that have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon such Securities or any Affiliate of the Company or of such other obligor. In determining whether the Holders of the requisite principal amount of Outstanding Securities of a series have performed any action hereunder, the principal amount of an Original Issue Discount Security that shall be deemed to be Outstanding for such purpose shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon a declaration of acceleration of the Maturity thereof pursuant to Section 7.02 and the principal amount of a Security denominated in a Foreign Currency that shall be deemed to be Outstanding for such purpose shall be the amount calculated pursuant to Section 3.11(b).

Paying Agent: The term "Paying Agent" shall have the meaning assigned to it in Section 6.02(a).

Person: The term "Person" shall mean an individual, a corporation, a limited liability company, a partnership, an association, a joint stock company, a trust, an unincorporated organization or a government or an agency or political subdivision thereof.

Place of Payment: The term "Place of Payment" shall mean, when used with respect to the Securities of any series, the place or places where the principal of and premium, if any, and interest on the Securities of that series are payable as specified pursuant to Section 3.01.

Predecessor Security: The term "Predecessor Security" shall mean, with respect to any Security, every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security, and, for the purposes of this definition, any Security authenticated and delivered under Section 3.07 in lieu of a lost, destroyed or stolen Security shall be deemed to evidence the same debt as the lost, destroyed or stolen Security.

Record Date: The term "Record Date" shall mean, with respect to any interest payable on any Security on any Interest Payment Date, the close of business on any date specified in such Security for the payment of interest pursuant to Section 3.01.

Redemption Date: The term "Redemption Date" shall mean, when used with respect to any Security to be redeemed, in whole or in part, the date fixed for such redemption by or pursuant to this Indenture and the terms of such Security, which, in the case of a Floating Rate Security, unless otherwise specified pursuant to Section 3.01, shall be an Interest Payment Date only.

Redemption Price: The term "Redemption Price," when used with respect to any Security to be redeemed, in whole or in part, shall mean the price at which it is to be redeemed pursuant to the terms of the Security and this Indenture.

Register: The term "Register" shall have the meaning assigned to it in Section 3.05(a).

Registrar: The term "Registrar" shall have the meaning assigned to it in Section 3.05(a).

Responsible Officer: The term "Responsible Officer," when used with respect to the Trustee, means any officer within the Corporate Trust Office of the Trustee (or any successor group of the Trustee) or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

SEC: The term “SEC” shall mean the U.S. Securities and Exchange Commission, as constituted from time to time.

Securities Act: The term “Securities Act” shall mean the Securities Act of 1933, as amended.

Security: The term “Security” or “Securities” shall have the meaning stated in the recitals and shall more particularly mean one or more of the Securities duly authenticated by the Trustee and delivered pursuant to the provisions of this Indenture.

Security Custodian: The term “Security Custodian” shall mean the custodian with respect to any Global Security appointed by the Depository, or any successor Person thereto, and shall initially be the Paying Agent.

Securityholder; Holder of Securities; Holder: The term “Securityholder” or “Holder of Securities” or “Holder,” shall mean the Person in whose name Securities shall be registered in the Register kept for that purpose hereunder.

Senior Indebtedness: The term “Senior Indebtedness” means the principal of (and premium, if any) and unpaid interest on (x) Indebtedness of the Company, whether outstanding on the date hereof or thereafter created, incurred, assumed or guaranteed, for money borrowed other than (a) any Indebtedness of the Company which when incurred, and without respect to any election under Section 1111(b) of the Federal Bankruptcy Code, was without recourse to the Company, (b) any Indebtedness of the Company to any of its Subsidiaries, (c) Indebtedness to any employee of the Company, (d) any liability for taxes, (e) Trade Payables and (f) any Indebtedness of the Company which is expressly subordinate in right of payment to any other Indebtedness of the Company, and (y) renewals, extensions, modifications and refundings of any such Indebtedness. For purposes of the foregoing and the definition of “Senior Indebtedness,” the phrase “subordinated in right of payment” means debt subordination only and not lien subordination, and accordingly, (i) unsecured indebtedness shall not be deemed to be subordinated in right of payment to secured indebtedness merely by virtue of the fact that it is unsecured, and (ii) junior liens, second liens and other contractual arrangements that provide for priorities among Holders of the same or different issues of indebtedness with respect to any collateral or the proceeds of collateral shall not constitute subordination in right of payment. This definition may be modified or superseded by a supplemental indenture.

Special Record Date: The term “Special Record Date” shall have the meaning assigned to it in Section 3.08(b)(i).

Stated Maturity: The term “Stated Maturity” when used with respect to any Security or any installment of interest thereon, shall mean the date specified in such Security as the fixed date on which the principal (or any portion thereof) of or premium, if any, on such Security or such installment of interest is due and payable.

Subsidiary: The term “Subsidiary,” when used with respect to any Person, shall mean:

(a) any corporation, limited liability company, association or other business entity of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency and after giving effect to any voting agreement or stockholders’ agreement that effectively transfers voting power) to vote in the election of directors, managers or trustees of the corporation, association or other business entity is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person (or a combination thereof); and

(b) any partnership (i) the sole general partner or the managing general partner of which is such Person or a Subsidiary of such Person or (ii) the only general partners of which are that Person or one or more Subsidiaries of that Person (or any combination thereof).

Successor Company: The term “Successor Company” shall have the meaning assigned to it in Section 3.06(i).

Trade Payables: The term “Trade Payables” means accounts payable or any other Indebtedness or monetary obligations to trade creditors created or assumed by the Company or any Subsidiary of the Company in the ordinary course of business (including guarantees thereof or instruments evidencing such liabilities).

Trust Indenture Act; TIA: The term “Trust Indenture Act” or “TIA” shall mean the Trust Indenture Act of 1939, as amended.

Trustee: The term “Trustee” shall mean the Person named as the “Trustee” in the first paragraph of this Indenture until a successor Trustee shall have become such with respect to one or more series of Securities pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, “Trustee” as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

U.S. Dollars: The term “U.S. Dollars” shall mean such currency of the United States as at the time of payment shall be legal tender for the payment of public and private debts.

U.S. Government Obligations: The term “U.S. Government Obligations” shall mean (i) direct non-callable obligations of, or guaranteed by, the United States or (ii) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States, in either case, for the payment of which guarantee or obligation the full faith and credit of the United States is pledged.

United States: The term “United States” shall mean the United States of America (including the States and the District of Columbia), its territories and its possessions and other areas subject to its jurisdiction.

ARTICLE II

FORMS OF SECURITIES

Section 2.01. Terms of the Securities.

(a) The Securities of each series shall be substantially in the form set forth in a Company Order or in one or more indentures supplemental hereto, and shall have such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture, and may have such letters, numbers or other marks of identification or designation and such legends or endorsements placed thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Indenture, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange on which any series of the Securities may be listed or of any automated quotation system on which any such series may be quoted, or to conform to usage, all as determined by the officers executing such Securities as conclusively evidenced by their execution of such Securities.

(b) The terms and provisions of the Securities shall constitute, and are hereby expressly made, a part of this Indenture, and, to the extent applicable, the Company and the Trustee, by their execution and delivery of this Indenture expressly agree to such terms and provisions and to be bound thereby.

Section 2.02. Form of Trustee’s Certificate of Authentication

(a) Only such of the Securities as shall bear thereon a certificate substantially in the form of the Trustee’s certificate of authentication hereinafter recited, executed by the Trustee by manual signature, shall be valid or become obligatory for any purpose or entitle the Holder thereof to any right or benefit under this Indenture.

(b) Each Security shall be dated the date of its authentication, except that any Global Security shall be dated as of the date specified as contemplated in Section 3.01.

(c) The form of the Trustee’s certificate of authentication to be borne by the Securities shall be substantially as follows:

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

Date of Authentication: _____, as Trustee

By: _____
Authorized Signatory

Section 2.03. Form of Trustee's Certificate of Authentication by an Authenticating Agent. If at any time there shall be an Authenticating Agent appointed with respect to any series of Securities, then the Trustee's Certificate of Authentication by such Authenticating Agent to be borne by Securities of each such series shall be substantially as follows:

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This is one of the Securities issued referred to in the within-mentioned Indenture.

Date of Authentication: _____, as Trustee

By: _____
Authenticating Agent

By: _____
Authorized Signatory

ARTICLE III

THE DEBT SECURITIES

Section 3.01. Amount; Issuable in Series. The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited. The Securities may be issued in one or more series. There shall be set forth in a Company Order or in one or more indentures supplemental hereto, prior to the issuance of Securities of any series:

- (a) the title of the Securities of the series (which shall distinguish the Securities of such series from the Securities of all other series, except to the extent that additional Securities of an existing series are being issued);
- (b) whether the Securities will be secured or unsecured, and the terms of any secured debt;
- (c) the terms of the subordination of any series of subordinated Securities;
- (d) any limit upon the aggregate principal amount of the Securities of the series that may be authenticated and delivered under this Indenture (except for Securities 10 authenticated and delivered upon transfer of, or in exchange for, or in lieu of, other Securities of such series pursuant to Section 3.04, Section 3.06, Section 3.07, Section 4.06, or Section 14.05);
- (e) the dates on which or periods during which the Securities of the series may be issued, and the dates on, or the range of dates within, which the principal of and premium, if any, on the Securities of such series are or may be payable or the method by which such date or dates shall be determined or extended;
- (f) the rate or rates at which the Securities of the series shall bear interest, if any, or the method by which such rate or rates shall be determined, the date or dates from which such interest shall accrue, or the method by which such date or dates shall be determined, the Interest Payment Dates on which any such interest

shall be payable, and the Record Dates for the determination of Holders to whom interest is payable on such Interest Payment Dates or the method by which such date or dates shall be determined, the right, if any, to extend or defer interest payments and the duration of such extension or deferral;

(g) if other than U.S. Dollars, the Currency in which Securities of the series shall be denominated or in which payment of the principal of, premium, if any, or interest on the Securities of the series shall be payable and any other terms concerning such payment;

(h) if the amount of payment of principal of, premium, if any, or interest on the Securities of the series may be determined with reference to an index, formula or other method including, but not limited to, an index based on a Currency or Currencies other than that in which the Securities are stated to be payable, the manner in which such amounts shall be determined;

(i) if the principal of, premium, if any, or interest on Securities of the series are to be payable, at the election of the Company or a Holder thereof, in a Currency other than that in which the Securities are denominated or stated to be payable without such election, the period or periods within which, and the terms and conditions upon which, such election may be made and the time and the manner of determining the exchange rate between the Currency in which the Securities are denominated or payable without such election and the Currency in which the Securities are to be paid if such election is made;

(j) the place or places, if any, in addition to or instead of the Corporate Trust Office of the Trustee where the principal of, premium, if any, and interest on Securities of the series shall be payable, and where Securities of any series may be presented for registration of transfer, exchange or conversion, and the place or places where notices and demands to or upon the Company in respect of the Securities of such series may be made;

(k) the form of consideration in which principal of, premium or interest on the Securities will be paid;

(l) the price or prices at which, the period or periods within which or the date or dates on which, and the terms and conditions upon which Securities of the series may be redeemed, in whole or in part, at the option of the Company, if the Company is to have that option;

(m) the obligation or right, if any, of the Company to redeem, purchase or repay Securities of the series pursuant to any sinking fund, amortization or analogous provisions or at the option of a Holder thereof and the price or prices at which, the period or periods within which or the date or dates on which, the Currency or Currencies in which and the terms and conditions upon which Securities of the series shall be redeemed, purchased or repaid, in whole or in part, pursuant to such obligation;

(n) if other than denominations of \$1,000 or any integral multiple thereof, the denominations in which Securities of the series shall be issuable;

(o) if other than the principal amount thereof, the portion of the principal amount of the Securities of the series which shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 7.02;

(p) whether the Securities of the series are to be issued as Original Issue Discount Securities and the amount of discount with which such Securities may be issued;

(q) provisions, if any, for the defeasance of Securities of the series in whole or in part and any addition or change in the provisions related to satisfaction and discharge;

(r) whether the Securities of the series are to be issued in whole or in part in the form of one or more Global Securities and, in such case, the Depositary for such Global Security or Securities and the terms and conditions, if any, upon which interests in such Global Security or Securities may be exchanged in whole or in part for the individual Securities represented thereby;

(s) the date as of which any Global Security of the series shall be dated if other than the original issuance of the first Security of the series to be issued;

(t) the form of the Securities of the series;

(u) if the Securities of the series are to be convertible into or exchangeable for any securities or property of any Person (including the Company), the terms and conditions upon which such Securities will be so convertible or exchangeable, and any additions or changes, if any, to permit or facilitate such conversion or exchange;

(v) whether the Securities of such series are subject to subordination and the terms of such subordination;

(w) any restriction or condition on the transferability of the Securities of such series;

(x) any addition or change in the provisions related to compensation and reimbursement of the Trustee which applies to Securities of such series;

(y) any addition or change in the provisions related to supplemental indentures set forth in Sections 14.04 and 14.02 which applies to Securities of such series;

(z) provisions, if any, granting special rights to Holders upon the occurrence of specified events;

(aa) any addition to or change in the Events of Default which applies to any Securities of the series and any change in the right of the Trustee or the requisite Holders of such Securities to declare the principal amount thereof due and payable pursuant to Section 7.02 and any addition or change in the provisions set forth in Article VII which applies to Securities of the series;

(bb) any addition to or change in the covenants set forth in Article VI which applies to Securities of the series; and

(cc) any other terms of the Securities of such series (which terms shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 14.01).

All Securities of any one series shall be substantially identical, except as to denomination and except as may otherwise be provided herein or set forth in a Company Order or in one or more indentures supplemental hereto.

Section 3.02. Denominations. In the absence of any specification pursuant to Section 3.01 with respect to Securities of any series, the Securities of such series shall be issuable only as Securities in denominations of any integral multiple of \$1,000, and shall be payable only in U.S. Dollars.

Section 3.03. Execution, Authentication, Delivery and Dating

(a) The Securities shall be executed in the name and on behalf of the Company by the manual or facsimile signature of its Chairman of the Board of Directors, Chief Executive Officer, President, Chief Operating Officer, Chief Financial Officer, one of its Vice Presidents or Treasurer. If the Person whose signature is on a Security no longer holds that office at the time the Security is authenticated and delivered, the Security shall nevertheless be valid.

(b) At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities and, if required pursuant to Section 3.01, a supplemental indenture or Company Order setting forth the terms of the Securities of a series.

The Trustee shall thereupon authenticate and deliver such Securities without any further action by the Company. The Company Order shall specify the amount of Securities to be authenticated and the date on which the original issue of Securities is to be authenticated.

(c) In authenticating the first Securities of any series and accepting the additional responsibilities under this Indenture in relation to such Securities the Trustee shall receive, and (subject to Section 11.02) shall be fully protected in relying upon an Officer's Certificate and an Opinion of Counsel, each prepared in accordance with Section 16.01 stating that the conditions precedent, if any, provided for in the Indenture have been complied with.

(d) The Trustee shall have the right to decline to authenticate and deliver the Securities under this Section 3.03 if the issue of the Securities pursuant to this Indenture will affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner which is not reasonably acceptable to the Trustee.

(e) Each Security shall be dated the date of its authentication, except as otherwise provided pursuant to Section 3.01 with respect to the Securities of such series.

(f) Notwithstanding the provisions of Section 3.01 and of this Section 3.03, if all of the Securities of any series are not to be originally issued at the same time, then the documents required to be delivered pursuant to this Section 3.03 must be delivered only once prior to the authentication and delivery of the first Security of such series;

(g) If the Company shall establish pursuant to Section 3.01 that the Securities of a series are to be issued in whole or in part in the form of one or more Global Securities, then the Company shall execute and the Trustee shall authenticate and deliver one or more Global Securities that (i) shall represent an aggregate amount equal to the aggregate principal amount of the Outstanding Securities of such series to be represented by such Global Securities, (ii) shall be registered, if in registered form, in the name of the Depository for such Global Security or Securities or the nominee of such Depository, (iii) shall be delivered by the Trustee to such Depository or pursuant to such Depository's instruction and (iv) shall bear a legend substantially to the following effect:

"Unless and until it is exchanged in whole or in part for the individual Securities represented hereby, this Global Security may not be transferred except as a whole by the Depository to a nominee of the Depository or by a nominee of the Depository to the Depository or another nominee of the Depository or by the Depository or any such nominee to a successor Depository or a nominee of such successor Depository."

The aggregate principal amount of each Global Security may from time to time be increased or decreased by adjustments made on the records of the Security Custodian, as provided in this Indenture.

(h) Each Depository designated pursuant to Section 3.01 for a Global Security in registered form must, at the time of its designation and at all times while it serves as such Depository, be a clearing agency registered under the Exchange Act and any other applicable statute or regulation.

(i) Members of, or participants in, the Depository ("**Members**") shall have no rights under this Indenture with respect to any Global Security held on their behalf by the Depository or by the Security Custodian under such Global Security, and the Depository may be treated by the Company, the Trustee, the Paying Agent and the Registrar and any of their agents as the absolute owner of such Global Security for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Company, the Trustee, the Paying Agent or the Registrar or any of their agents from giving effect to any written certification, proxy or other authorization furnished by the Depository or impair, as between the Depository and its Members, the operation of customary practices of the Depository governing the exercise of the rights of an owner a beneficial interest in any Global Security. The Holder of a Global Security may grant proxies and otherwise authorize any Person, including Members and Persons that may hold interests through Members, to take any action that a Holder is entitled to take under this Indenture or the Securities.

(j) No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in one of the forms provided for herein duly executed by the Trustee or by an Authenticating Agent by manual or facsimile signature of an authorized signatory of the Trustee, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder and is entitled to the benefits of this Indenture.

Section 3.04. Temporary Securities.

(a) Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities that are printed, lithographed, typewritten, mimeographed or otherwise reproduced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued, in registered form and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as conclusively evidenced by their execution of such Securities. Any such temporary Security may be in global form, representing all or a portion of the Outstanding Securities of such series. Every such temporary Security shall be executed by the Company and shall be authenticated and delivered by the Trustee upon the same conditions and in substantially the same manner, and with the same effect, as the definitive Security or Securities in lieu of which it is issued.

(b) If temporary Securities of any series are issued, the Company will cause definitive Securities of such series to be prepared without unreasonable delay. After the preparation of definitive Securities of such series, the temporary Securities of such series shall be exchangeable for definitive Securities of such series upon surrender of such temporary Securities at the office or agency of the Company in a Place of Payment for such series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations and of like tenor. Until so exchanged, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series.

(c) Upon any exchange of a portion of a temporary Global Security for a definitive Global Security or for the individual Securities represented thereby pursuant to this Section 3.04 or Section 3.06, the temporary Global Security shall be endorsed by the Trustee to reflect the reduction of the principal amount evidenced thereby, whereupon the principal amount of such temporary Global Security shall be reduced for all purposes by the amount so exchanged and endorsed.

Section 3.05. Registrar.

(a) The Company will keep, at an office or agency to be maintained by it in a Place of Payment where Securities may be presented for registration or presented and surrendered for registration of transfer or of exchange, and where Securities of any series that are convertible or exchangeable may be surrendered for conversion or exchange, as applicable (the "**Registrar**"), a security register for the registration and the registration of transfer or of exchange of the Securities (the registers maintained in such office and in any other office or agency of the Company in a Place of Payment being herein sometimes collectively referred to as the "**Register**"), as in this Indenture provided, which Register shall at all reasonable times be open for inspection by the Trustee. Such Register shall be in written form or in any other form capable of being converted into written form within a reasonable time. The Company may have one or more co-Registrars; the term "**Registrar**" includes any co-registrar.

(b) The Company shall enter into an appropriate agency agreement with any Registrar or co-Registrar not a party to this Indenture. The agreement shall implement the provisions of this Indenture that relate to such agent. The Company shall notify the Trustee of the name and address of each such agent. If the Company fails to maintain a Registrar for any series, the Trustee shall act as such and shall be entitled to appropriate compensation therefor pursuant to Section 11.01. The Company or any Affiliate thereof may act as Registrar, co-Registrar or transfer agent.

(c) The Company hereby appoints the Trustee at its Corporate Trust Office as Registrar in connection with the Securities and this Indenture, until such time as another Person is appointed as such.

Section 3.06. Transfer and Exchange.

(a) Transfer.

(i) Upon surrender for registration of transfer of any Security of any series at the Registrar the Company shall execute, and the Trustee or any Authenticating Agent shall authenticate and deliver, in the name of the designated transferee, one or more new Securities of the same series for like aggregate principal amount of any authorized denomination or denominations. The transfer of any Security shall not be valid as against the Company or the Trustee unless registered at the Registrar at the request of the Holder, or at the request of his, her or its attorney duly authorized in writing.

(ii) Notwithstanding any other provision of this Section, unless and until it is exchanged in whole or in part for the individual Securities represented thereby, a Global Security representing all or a portion of the Securities of a series may not be transferred except as a whole by the Depository for such series to a nominee of such Depository or by a nominee of such Depository to such Depository or another nominee of such Depository or by such Depository or any such nominee to a successor Depository for such series or a nominee of such successor Depository.

(b) Exchange.

(i) At the option of the Holder, Securities of any series (other than a Global Security, except as set forth below) may be exchanged for other Securities of the same series for like aggregate principal amount of any authorized denomination or denominations, upon surrender of the Securities to be exchanged at the Registrar.

(ii) Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities that the Holder making the exchange is entitled to receive.

(c) Exchange of Global Securities for Individual Securities. Except as provided below, owners of beneficial interests in Global Securities will not be entitled to receive individual Securities.

(i) Individual Securities shall be issued to all owners of beneficial interests in a Global Security in exchange for such interests if: (A) at any time the Depository for the Securities of a series notifies the Company that it is unwilling or unable to continue as Depository for the Securities of such series or if at any time the Depository for the Securities of such series shall no longer be eligible under Section 3.03(h) and, in each case, a successor Depository is not appointed by the Company within 90 days of such notice, or (B) the Company executes and delivers to the Trustee and the Registrar an Officer's Certificate stating that such Global Security shall be so exchangeable.

In connection with the exchange of an entire Global Security for individual Securities pursuant to this subsection (c), such Global Security shall be deemed to be surrendered to the Trustee for cancellation, and the Company shall execute, and the Trustee, upon receipt of a Company Order for the authentication and delivery of individual Securities of such series, will authenticate and deliver to each beneficial owner identified by the Depository in exchange for its beneficial interest in such Global Security, an equal aggregate principal amount of individual Securities of authorized denominations.

(ii) The owner of a beneficial interest in a Global Security will be entitled to receive an individual Security in exchange for such interest if an Event of Default has occurred and is

continuing. Upon receipt by the Security Custodian and Registrar of instructions from the Holder of a Global Security directing the Security Custodian and Registrar to (x) issue one or more individual Securities in the amounts specified to the owner of a beneficial interest in such Global Security and (y) debit or cause to be debited an equivalent amount of beneficial interest in such Global Security, subject to the rules and regulations of the Depositary:

(A) the Security Custodian and Registrar shall notify the Company and the Trustee of such instructions, identifying the owner and amount of such beneficial interest in such Global Security;

(B) the Company shall promptly execute and the Trustee, upon receipt of a Company Order for the authentication and delivery of individual Securities of such series, shall authenticate and deliver to such beneficial owner individual Securities in an equivalent amount to such beneficial interest in such Global Security; and

(C) the Security Custodian and Registrar shall decrease such Global Security by such amount in accordance with the foregoing. In the event that the individual Securities are not issued to each such beneficial owner promptly after the Registrar has received a request from the Holder of a Global Security to issue such individual Securities, the Company expressly 14 acknowledges, with respect to the right of any Holder to pursue a remedy pursuant to Section 7.07 hereof, the right of any beneficial Holder of Securities to pursue such remedy with respect to the portion of the Global Security that represents such beneficial Holder's Securities as if such individual Securities had been issued.

(iii) If specified by the Company pursuant to Section 3.01 with respect to a series of Securities, the Depositary for such series of Securities may surrender a Global Security for such series of Securities in exchange in whole or in part for individual Securities of such series on such terms as are acceptable to the Company and such Depositary. Thereupon, the Company shall execute, and the Trustee shall authenticate and deliver, without service charge,

(A) to each Person specified by such Depositary a new individual Security or Securities of the same series, of any authorized denomination as requested by such Person in aggregate principal amount equal to and in exchange for such Person's beneficial interest in the Global Security; and

(B) to such Depositary a new Global Security in a denomination equal to the difference, if any, between the principal amount of the surrendered Global Security and the aggregate principal amount of individual Securities delivered to Holders thereof.

(iv) In any exchange provided for in clauses (i) through (iii), the Company will execute and the Trustee will authenticate and deliver individual Securities in registered form in authorized denominations.

(v) Upon the exchange in full of a Global Security for individual Securities, such Global Security shall be canceled by the Trustee. Individual Securities issued in exchange for a Global Security pursuant to this Section shall be registered in such names and in such authorized denominations as the Depositary for such Global Security, pursuant to instructions from its direct or indirect participants or otherwise, shall instruct the Trustee. The Trustee shall deliver such Securities to the Persons in whose names such Securities are so registered.

(d) All Securities issued upon any registration of transfer or exchange of Securities shall be valid obligations of the Company evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered for such registration of transfer or exchange.

(e) Every Security presented or surrendered for registration of transfer, or for exchange or payment shall (if so required by the Company, the Trustee or the Registrar) be duly endorsed, or be accompanied by a written instrument or instruments of transfer in form satisfactory to the Company, the Trustee and the Registrar, duly executed by the Holder thereof or by his, her or its attorney duly authorized in writing.

(f) No service charge will be made for any registration of transfer or exchange of Securities. The Company may require payment of a sum sufficient to cover any tax, assessment or other governmental charge that may be imposed in connection with any registration of transfer or exchange of Securities, other than those expressly provided in this Indenture to be made at the Company's own expense or without expense or charge to the Holders.

(g) The Company shall not be required to (i) register, transfer or exchange Securities of any series during a period beginning at the opening of business 15 days before the day of the transmission of a notice of redemption of Securities of such series selected for redemption under Section 4.03 and ending at the close of business on the day of such transmission, or (ii) register, transfer or exchange any Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.

(h) Prior to the due presentation for registration of transfer or exchange of Page 27 any Security, the Company, the Trustee, the Paying Agent, the Registrar, any co-Registrar or any of their agents may deem and treat the Person in whose name a Security is registered as the absolute owner of such Security (whether or not such Security shall be overdue and notwithstanding any notation of ownership or other writing thereon) for all purposes whatsoever, and none of the Company, the Trustee, the Paying Agent, the Registrar, any co-Registrar or any of their agents shall be affected by any notice to the contrary.

(i) In case a successor Company ("**Successor Company**") has executed an indenture supplemental hereto with the Trustee pursuant to Article XIV, any of the Securities authenticated or delivered pursuant to such transaction may, from time to time, at the request of the Successor Company, be exchanged for other Securities executed in the name of the Successor Company with such changes in phraseology and form as may be appropriate, but otherwise identical to the Securities surrendered for such exchange and of like principal amount; and the Trustee, upon Company Order of the Successor Company, shall authenticate and deliver Securities as specified in such order for the purpose of such exchange. If Securities shall at any time be authenticated and delivered in any new name of a Successor Company pursuant to this Section 3.06 in exchange or substitution for or upon registration of transfer of any Securities, such Successor Company, at the option of the Holders but without expense to them, shall provide for the exchange of all Securities at the time Outstanding for Securities authenticated and delivered in such new name.

(j) Each Holder of a Security agrees to indemnify the Company and the Trustee against any liability that may result from the transfer, exchange or assignment of such Holder's Security in violation of any provision of this Indenture and/or applicable United States federal or state securities laws.

(k) The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Security other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of, this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

(l) Neither the Trustee nor any agent of the Trustee shall have any responsibility for any actions taken or not taken by the Depository.

Section 3.07. Mutilated, Destroyed, Lost and Stolen Securities.

(a) If (i) any mutilated Security is surrendered to the Trustee at its Corporate Trust Office or (ii) the Company and the Trustee receive evidence to their satisfaction of the destruction, loss or theft of any Security, and there is delivered to the Company and the Trustee security or indemnity bond satisfactory to them to

save each of them and any Paying Agent harmless, and neither the Company nor the Trustee receives notice that such Security has been acquired by a protected purchaser, then the Company shall execute and upon Company Order the Trustee shall authenticate and deliver, in exchange for or in lieu of any such mutilated, destroyed, lost or stolen Security, a new Security of the same series and of like tenor, form, terms and principal amount, bearing a number not contemporaneously outstanding, that neither gain nor loss in interest shall result from such exchange or substitution.

(b) In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, pay the amount due on such Security in accordance with its terms.

(c) Upon the issuance of any new Security under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in respect thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

(d) Every new Security of any series issued pursuant to this Section shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of that series duly issued hereunder.

(e) The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities.

Section 3.08. Payment of Interest; Interest Rights Preserved.

(a) Interest on any Security that is payable and is punctually paid or duly provided for on any Interest Payment Date shall be paid to the Person in whose name such Security (or one or more Predecessor Securities) is registered at the close of business on the Record Date for such interest notwithstanding the cancellation of such Security upon any transfer or exchange subsequent to the Record Date. Payment of interest on Securities shall be made at the Corporate Trust Office (except as otherwise specified pursuant to Section 3.01) or, at the option of the Company, by check mailed to the address of the Person entitled thereto as such address shall appear in the Register or, in accordance with arrangements satisfactory to the Trustee, by wire transfer to an account designated by the Holder.

(b) Any interest on any Security that is payable but is not punctually paid or duly provided for on any Interest Payment Date (herein called "Defaulted Interest") shall forthwith cease to be payable to the Holder on the relevant Record Date by virtue of his, her or its having been such a Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (i) or (ii) below:

(i) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names such Securities (or their respective Predecessor Securities) are registered at the close of business on a special record date for the payment of such Defaulted Interest (a "**Special Record Date**"), which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each such Security and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 calendar days and not less than 10 calendar days prior to the date of the proposed payment and not less than 10 calendar days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first-class postage

prepaid, to the Holders of such Securities at their addresses as they appear in the Register, not less than 10 calendar days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been mailed as aforesaid, such Defaulted Interest shall be paid to the Persons in whose names such Securities (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (ii).

(ii) The Company may make payment of any Defaulted Interest on Securities in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

(c) Subject to the provisions set forth herein relating to Record Dates, each Security delivered pursuant to any provision of this Indenture in exchange or substitution for, or upon registration of transfer of, any other Security shall carry all the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

Section 3.09. Cancellation. Unless otherwise specified pursuant to Section 3.01 for Securities of any series, all Securities surrendered for payment, redemption, registration of transfer or exchange or credit against any sinking fund or otherwise shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee for cancellation and shall be promptly canceled by it and, if surrendered to the Trustee, shall be promptly canceled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder that the Company may have acquired in any manner whatsoever, and all Securities so delivered shall be promptly canceled by the Trustee. No Securities shall be authenticated in lieu of or in exchange for any Securities canceled as provided in this Section, except as expressly permitted by this Indenture. The Trustee shall dispose of all canceled Securities held by it in accordance with its then customary procedures and deliver a certificate of such disposal to the Company upon its request therefor. The acquisition of any Securities by the Company shall not operate as a redemption or satisfaction of the Indebtedness represented thereby unless and until such Securities are surrendered to the Trustee for cancellation.

Section 3.10. Computation of Interest. Except as otherwise specified pursuant to Section 3.01 for Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year of twelve 30-day months.

Section 3.11. Currency of Payments in Respect of Securities

(a) Except as otherwise specified pursuant to Section 3.01 for Securities of any series, payment of the principal of and premium, if any, and interest on Securities of such series will be made in U.S. Dollars.

(b) For purposes of any provision of the Indenture in which the Holders of Outstanding Securities may perform an action that requires that a specified percentage of the Outstanding Securities of all series perform such action and for purposes of any decision or determination by the Trustee of amounts due and unpaid for the principal of and premium, if any, and interest on the Securities of all series in respect of which moneys are to be disbursed ratably, the principal of and premium, if any, and interest on the Outstanding Securities denominated in a Foreign Currency will be the amount in U.S. Dollars based upon exchange rates, determined as specified pursuant to Section 3.01 for Securities of such series, as of the date for determining whether the Holders entitled to perform such action have performed it or as of the date of such decision or determination by the Trustee, as the case may be.

(c) Any decision or determination to be made regarding exchange rates shall be made by an agent appointed by the Company; provided, that such agent shall accept such appointment in writing and the terms of such appointment shall, in the opinion of the Company at the time of such appointment, require such agent to make such determination by a method consistent with the method provided pursuant to Section 3.01 for the making of such decision or determination. All decisions and determinations of such agent regarding exchange rates shall, in

the absence of manifest error, be conclusive for all purposes and irrevocably binding upon the Company, the Trustee and all Holders of the Securities.

Section 3.12. Judgments. The Company may provide pursuant to Section 3.01 for Securities of any series that (a) the obligation, if any, of the Company to pay the principal of, premium, if any, and interest on the Securities of any series in a Foreign Currency or U.S. Dollars (the “**Designated Currency**”) as may be specified pursuant to Section 3.01 is of the essence and agrees that, to the fullest extent possible under applicable law, judgments in respect of such Securities shall be given in the Designated Currency; (b) the obligation of the Company to make payments in the Designated Currency of the principal of and premium, if any, and interest on such Securities shall, notwithstanding any payment in any other Currency (whether pursuant to a judgment or otherwise), be discharged only to the extent of the amount in the Designated Currency that the Holder receiving such payment may, in accordance with normal banking procedures, purchase with the sum paid in such other Currency (after any premium and cost of exchange) on the business day in the country of issue of the Designated Currency or in the international banking community (in the case of a composite currency) immediately following the day on which such Holder receives such payment; (c) if the amount in the Designated Currency that may be so purchased for any reason falls short of the amount originally due, the Company shall pay such additional amounts as may be necessary to compensate for such shortfall; and (d) any obligation of the Company not discharged by such payment shall be due as a separate and independent obligation and, until discharged as provided herein, shall continue in full force and effect.

Section 3.13. CUSIP Numbers. The Company in issuing any Securities may use CUSIP, ISIN or other similar numbers, if then generally in use, and thereafter with respect to such series, the Trustee may use such numbers in any notice of redemption or exchange with respect to such series provided that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers. The Company will promptly notify the Trustee in writing of any change in the CUSIP, ISIN or other similar numbers.

ARTICLE IV

REDEMPTION OF SECURITIES

Section 4.01. Applicability of Right of Redemption. Redemption of Securities (other than pursuant to a sinking fund, amortization or analogous provision) permitted by the terms of any series of Securities shall be made (except as otherwise specified pursuant to Section 3.01 for Securities of any series) in accordance with this Article; provided, however, that if any such terms of a series of Securities shall conflict with any provision of this Article, the terms of such series shall govern.

Section 4.02. Selection of Securities to be Redeemed

(a) If the Company shall at any time elect to redeem all or any portion of the Securities of a series then Outstanding, it shall at least 30 days prior to the Redemption Date fixed by the Company (unless a shorter period shall be satisfactory to the Trustee) notify the Trustee of such Redemption Date and of the principal amount of Securities to be redeemed, and thereupon the Trustee shall select, by lot or in such other manner as the Trustee shall deem appropriate and which may provide for the selection for redemption of a portion of the principal amount of any Security of such series; provided that the unredeemed portion of the principal amount of any Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security. In any case where more than one Security of such series is registered in the same name, the Trustee may treat the aggregate principal amount so registered as if it were represented by one Security of such series. The Trustee shall, as soon as practicable, notify the Company in writing of the Securities and portions of Securities so selected.

(b) For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Security redeemed or to be redeemed only in part, to the portion of the principal amount of such Security that has been or is to be redeemed. If the Company shall

so direct, Securities registered in the name of the Company, any Affiliate or any Subsidiary thereof shall not be included in the Securities selected for redemption.

Section 4.03. Notice of Redemption.

(a) Notice of redemption shall be given by the Company or, at the Company's request, by the Trustee in the name and at the expense of the Company; provided, however, that the Company makes such request at least 3 days prior to the date by which such notice of redemption must be given to Holders in accordance with this Section 4.03; provided further that, the text of such notice shall be prepared by the Company. Any such notice shall be delivered in the manner provided in Section 16.04 not less than 30 days before the Redemption Date unless the Trustee consents to a shorter period, to the Holders of Securities of any series to be redeemed in whole or in part pursuant to this Article. Any notice so given shall be conclusively presumed to have been duly given, whether or not the Holder receives such notice. Failure to give such notice, or any defect in such notice to the Holder of any Security of a series designated for redemption, in whole or in part, shall not affect the sufficiency of any notice of redemption with respect to the Holder of any other Security of such series.

(b) All notices of redemption shall identify the Securities to be redeemed (including CUSIP, ISIN or other similar numbers, if available) and shall state:

(i) such election by the Company to redeem Securities of such series pursuant to provisions contained in this Indenture or the terms of the Securities of such series or a supplemental indenture establishing such series, if such be the case;

(ii) the Redemption Date;

(iii) the Redemption Price;

(iv) if less than all Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amounts) of the Securities of such series to be redeemed;

(v) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed, and that, if applicable, interest thereon shall cease to accrue on and after said date;

(vi) the Place or Places of Payment where such Securities are to be surrendered for payment of the Redemption Price;

(vii) that the redemption is for a sinking fund, if such is the case; and

(viii) that the Securities must be surrendered to the Paying Agent for payment of the Redemption Price.

If the Redemption Price is not known at the time such notice is to be given, the actual Redemption Price, calculated as described in this Indenture, or the Securities to be redeemed, will be set forth in an additional Officer's Certificate of the Company delivered to the Trustee, no later than two Business Days prior to the Redemption Date.

Section 4.04. Deposit of Redemption Price. On or prior to 11:00 a.m., New York City time, on the Redemption Date for any Securities, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 6.03) an amount of money in the Currency in which such Securities are denominated (except as provided pursuant to Section 3.01) sufficient to pay the Redemption Price of such Securities or any portions thereof that are to be redeemed on that date.

Section 4.05. Securities Payable on Redemption Date. Notice of redemption having been given as aforesaid, any Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price and from and after such date (unless the Company shall Default in the payment of the Redemption Price) such Securities shall cease to bear interest. Upon surrender of any such Security for redemption in accordance with said notice, such Security shall be paid by the Company at the Redemption Price; provided, however, that (unless otherwise provided pursuant to Section 3.01) installments of interest that have a Stated Maturity on or prior to the Redemption Date for such Securities shall be payable according to the terms of such Securities and the provisions of Section 3.08.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal thereof and premium, if any, thereon shall, until paid, bear interest from the Redemption Date at the rate prescribed therefor in the Security.

Section 4.06. Securities Redeemed in Part. Any Security that is to be redeemed only in part shall be surrendered at the Corporate Trust Office or such other office or agency of the Company as is specified pursuant to Section 3.01 with, if the Company, the Registrar or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company, the Registrar and the Trustee duly executed by the Holder thereof or his, her or its attorney duly authorized in writing, and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Security or Securities of the same series, of like tenor and form, of any authorized denomination as requested by such Holder in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered; except that if a Global Security is so surrendered, the Company shall execute, and the Trustee shall authenticate and deliver to the Depository for such Global Security, without service charge, a new Global Security in a denomination equal to and in exchange for the unredeemed portion of the principal of the Global Security so surrendered. In the case of a Security providing appropriate space for such notation, at the option of the Holder thereof, the Trustee, in lieu of delivering a new Security or Securities as aforesaid, may make a notation on such Security of the payment of the redeemed portion thereof.

ARTICLE V

SINKING FUNDS

Section 5.01. Applicability of Sinking Fund.

(a) Redemption of Securities permitted or required pursuant to a sinking fund for the retirement of Securities of a series by the terms of such series of Securities shall be made in accordance with such terms of such series of Securities and this Article, except as otherwise specified pursuant to Section 3.01 for Securities of such series, provided, however, that if any such terms of a series of Securities shall conflict with any provision of this Article, the terms of such series shall govern.

(b) The minimum amount of any sinking fund payment provided for by the terms of Securities of any series is herein referred to as a **Mandatory Sinking Fund Payment,**” and any payment in excess of such minimum amount provided for by the terms of Securities of any series is herein referred to as an **Optional Sinking Fund Payment.**” If provided for by the terms of Securities of any series, the cash amount of any Mandatory Sinking Fund Payment may be subject to reduction as provided in Section 5.02.

Section 5.02. Mandatory Sinking Fund Obligation. The Company may, at its option, satisfy any Mandatory Sinking Fund Payment obligation, in whole or in part, with respect to a particular series of Securities by (a) delivering to the Trustee Securities of such series in transferable form theretofore purchased or otherwise acquired by the Company or redeemed at the election of the Company pursuant to Section 4.03 or (b) receiving credit for Securities of such series (not previously so credited) acquired by the Company and theretofore delivered to the Trustee. The Trustee shall credit such Mandatory Sinking Fund Payment obligation with an amount equal to the Redemption Price specified in such Securities for redemption through operation of the sinking fund and the amount of such Mandatory Sinking Fund Payment shall be reduced accordingly. If the Company shall elect to so satisfy any Mandatory Sinking Fund Payment obligation, it shall deliver to the Trustee not less than 45 days prior to the relevant sinking fund payment date a written notice signed on behalf of the Company by its Chairman of the Board

of Directors, Chief Executive Officer, President, Chief Operating Officer, Chief Financial Officer, one of its Vice Presidents, its Treasurer or one of its Assistant Treasurers, which shall designate the Securities (and portions thereof, if any) so delivered or credited and which shall be accompanied by such Securities (to the extent not theretofore delivered) in transferable form. In case of the failure of the Company, at or before the time so required, to give such notice and deliver such Securities the Mandatory Sinking Fund Payment obligation shall be paid entirely in moneys.

Section 5.03. Optional Redemption at Sinking Fund Redemption Price. In addition to the sinking fund requirements of Section 5.02, to the extent, if any, provided for by the terms of a particular series of Securities, the Company may, at its option, make an Optional Sinking Fund Payment with respect to such Securities. Unless otherwise provided by such terms, (a) to the extent that the right of the Company to make such Optional Sinking Fund Payment shall not be exercised in any year, it shall not be cumulative or carried forward to any subsequent year, and (b) such optional payment shall operate to reduce the amount of any Mandatory Sinking Fund Payment obligation as to Securities of the same series. If the Company intends to exercise its right to make such optional payment in any year it shall deliver to the Trustee not less than 45 days prior to the relevant sinking fund payment date a certificate signed by its Chairman of the Board of Directors, Chief Executive Officer, President, Chief Operating Officer, Chief Financial Officer, one of its Vice Presidents, Treasurer or one of its Assistant Treasurers stating that the Company will exercise such optional right, and specifying the amount which the Company will pay on or before the next succeeding sinking fund payment date. Such certificate shall also state that no Event of Default has occurred and is continuing.

Section 5.04. Application of Sinking Fund Payment

(a) If the sinking fund payment or payments made in funds pursuant to either Section 5.02 or 5.03 with respect to a particular series of Securities plus any unused balance of any preceding sinking fund payments made in funds with respect to such series shall exceed \$50,000 (or a lesser sum if the Company shall so request, or such equivalent sum for Securities denominated other than in U.S. Dollars), it shall be applied by the Trustee on the sinking fund payment date next following the date of such payment, unless the date of such payment shall be a sinking fund payment date, in which case such payment shall be applied on such sinking fund payment date, to the redemption of Securities of such series at the redemption price specified pursuant to Section 4.03(b). The Trustee shall select, in the manner provided in Section 4.02, for redemption on such sinking fund payment date, a sufficient principal amount of Securities of such series to absorb said funds, as nearly as may be, and shall, at the expense and in the name of the Company, thereupon cause notice of redemption of the Securities to be given in substantially the manner provided in Section 4.03(a) for the redemption of Securities in part at the option of the Company, except that the notice of redemption shall also state that the Securities are being redeemed for the sinking fund. Any sinking fund moneys not so applied by the Trustee to the redemption of Securities of such series shall be added to the next sinking fund payment received in funds by the Trustee and, together with such payment, shall be applied in accordance with the provisions of this Section 5.04. Any and all sinking fund moneys held by the Trustee on the last sinking fund payment date with respect to Securities of such series, and not held for the payment or redemption of particular Securities of such series, shall be applied by the Trustee to the payment of the principal of the Securities of such series at Maturity.

(b) On or prior to each sinking fund payment date, the Company shall pay to the Trustee a sum equal to all interest accrued to but not including the date fixed for redemption on Securities to be redeemed on such sinking fund payment date pursuant to this Section 5.04.

(c) The Trustee shall not redeem any Securities of a series with sinking fund moneys or mail any notice of redemption of Securities of such series by operation of the sinking fund during the continuance of a Default in payment of interest on any Securities of such series or of any Event of Default (other than an Event of Default occurring as a consequence of this paragraph) of which the Trustee has actual knowledge, except that if the notice of redemption of any Securities of such series shall theretofore have been mailed in accordance with the provisions hereof, the Trustee shall redeem such Securities if funds sufficient for that purpose shall be deposited with the Trustee in accordance with the terms of this Article. Except as aforesaid, any moneys in the sinking fund at the time any such Default or Event of Default shall occur and any moneys thereafter paid into the sinking fund shall, during the continuance of such Default or Event of Default, be held as security for the payment of all the Securities of such series; provided, however, that in case such Default or Event of Default shall have been cured or waived as

provided herein, such moneys shall thereafter be applied on the next sinking fund payment date on which such moneys are required to be applied pursuant to the provisions of this Section 5.04.

ARTICLE VI

PARTICULAR COVENANTS OF THE COMPANY

The Company hereby covenants and agrees as follows:

Section 6.01. Payments of Securities. The Company will duly and punctually pay the principal of and premium, if any, on each series of Securities, and the interest which shall have accrued thereon, at the dates and place and in the manner provided in the Securities and in this Indenture.

Section 6.02. Paying Agent.

(a) The Company will maintain in each Place of Payment for any series of Securities, if any, an office or agency where Securities may be presented or surrendered for payment, where Securities of such series may be surrendered for registration of transfer or exchange and where notices and demands to or upon the Company in respect of the Securities and this Indenture may be served (the "**Paying Agent**"). The Company will give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as Paying Agent to receive all presentations, surrenders, notices and demands.

(b) The Company may also from time to time designate different or additional offices or agencies where the Securities of any series may be presented or surrendered for any or all such purposes (in or outside of such Place of Payment), and may from time to time rescind any such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligations described in the preceding paragraph. The Company will give prompt written notice to the Trustee of any such additional designation or rescission of designation and of any change in the location of any such different or additional office or agency. The Company shall enter into an appropriate agency agreement with any Paying Agent not a party to this Indenture. The agreement shall implement the provisions of this Indenture that relate to such agent. The Company shall notify the Trustee of the name and address of each such agent. The Company or any Affiliate thereof may act as Paying Agent.

Section 6.03. To Hold Payment in Trust

(a) If the Company or an Affiliate thereof shall at any time act as Paying Agent with respect to any series of Securities, then, on or before the date on which the principal of and premium, if any, or interest on any of the Securities of that series by their terms or as a result of the calling thereof for redemption shall become payable, the Company or such Affiliate will segregate and hold in trust for the benefit of the Holders of such Securities or the Trustee a sum sufficient to pay such principal and premium, if any, or interest which shall have so become payable until such sums shall be paid to such Holders or otherwise disposed of as herein provided, and will notify the Trustee of its action or failure to act in that regard. Upon any proceeding under any federal bankruptcy laws with respect to the Company or any Affiliate thereof, if the Company or such Affiliate is then acting as Paying Agent, the Trustee shall replace the Company or such Affiliate as Paying Agent.

(b) If the Company shall appoint, and at the time have, a Paying Agent for the payment of the principal of and premium, if any, or interest on any series of Securities, then prior to 11:00 a.m., New York City time, on the date on which the principal of and premium, if any, or interest on any of the Securities of that series shall become payable as aforesaid, whether by their terms or as a result of the calling thereof for redemption, the Company will deposit with such Paying Agent a sum sufficient to pay such principal and premium, if any, or interest, such sum to be held in trust for the benefit of the Holders of such Securities or the Trustee, and (unless such

Paying Agent is the Trustee), the Company or any other obligor of such Securities will promptly notify the Trustee of its payment or failure to make such payment.

(c) If the Paying Agent shall be other than the Trustee, the Company will cause such Paying Agent to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section 6.03, that such Paying Agent shall:

(i) hold all moneys held by it for the payment of the principal of and premium, if any, or interest on the Securities of that series in trust for the benefit of the Holders of such Securities until such sums shall be paid to such Holders or otherwise disposed of as herein provided;

(ii) give to the Trustee notice of any Default by the Company or any other obligor upon the Securities of that series in the making of any payment of the principal of and premium, if any, or interest on the Securities of that series; and

(iii) at any time during the continuance of any such Default, upon the written request of the Trustee, pay to the Trustee all sums so held in trust by such Paying Agent.

(d) Anything in this Section 6.03 to the contrary notwithstanding, the Company may at any time, for the purpose of obtaining a release, satisfaction or discharge of this Indenture or for any other reason, pay or cause to be paid to the Trustee all sums held in trust by the Company or by any Paying Agent other than the Trustee as required by this Section 6.03, such sums to be held by the Trustee upon the same trusts as those upon which such sums were held by the Company or such Paying Agent.

(e) Subject to any applicable abandoned property law, any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of and premium, if any, or interest on any Security of any series and remaining unclaimed for two years after such principal and premium, if any, or interest has become due and payable shall be paid to the Company upon Company Order or (if then held by the Company) shall be discharged from such trust, and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment of such amounts without interest thereon, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; provided, however, that the Trustee or such Paying Agent before being required to make any such repayment, may at the expense of the Company cause to be published once, in a newspaper published in the English language, customarily published on each Business Day and of general circulation in _____, notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid to the Company.

Section 6.04. Merger, Consolidation and Sale of Assets. Except as otherwise provided as contemplated by Section 3.01 with respect to any series of Securities:

(a) The Company will not consolidate with any other entity or accept a merger of any other entity into the Company or permit the Company to be merged into any other entity, or sell other than for cash or lease all or substantially all its assets to another entity, or purchase all or substantially all the assets of another entity, unless (i) either the Company shall be the continuing entity, or (ii) the successor, transferee or lessee entity (if other than the Company) shall expressly assume, by indenture supplemental hereto, executed and delivered by such entity prior to or simultaneously with such consolidation, merger, sale or lease, the due and punctual payment of the principal of and interest and premium, if any, on all the Securities, according to their tenor, and the due and punctual performance and observance of all other obligations to the Holders and the Trustee under this Indenture or under the Securities to be performed or observed by the Company. A purchase by a Subsidiary of all or substantially all of the assets of another entity shall not be deemed to be a purchase of such assets by the Company.

(b) Upon any consolidation with or merger into any other entity, or any sale other than for cash, or any conveyance or lease of all or substantially all of the assets of the Company in accordance with this

Section 6.04, the successor entity formed by such consolidation or into or with which the Company is merged or to which the Company is sold or to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor entity had been named as the Company herein, and thereafter, except in the case of a lease, the predecessor Company shall be relieved of all obligations and covenants under this Indenture and the Securities, and from time to time such entity may exercise each and every right and power of the Company under this Indenture, in the name of the Company, or in its own name; and any act or proceeding by any provision of this Indenture required or permitted to be done by the Board of Directors or any officer of the Company may be done with like force and effect by the like board or officer of any entity that shall at the time be the successor of the Company hereunder. In the event of any such sale or conveyance, but not any such lease, the Company (or any successor entity which shall theretofore have become such in the manner described in this Section 6.04) shall be discharged from all obligations and covenants under this Indenture and the Securities and may thereupon be dissolved and liquidated.

Section 6.05. Compliance Certificate. Except as otherwise provided as contemplated by Section 3.01 with respect to any series of Securities, the Company shall furnish to the Trustee annually, within 120 days after the end of each fiscal year, a brief certificate from the Chief Executive Officer, President, Chief Operating Officer, Principal Financial Officer, Principal Accounting Officer, any Vice President or Treasurer as to his or her knowledge of the Company's compliance with all conditions and covenants under this Indenture (which compliance shall be determined without regard to any period of grace or requirement of notice provided under this Indenture) and, in the event of any Default, specifying each such Default and the nature and status thereof of which such person may have knowledge. Such certificates need not comply with Section 16.01 of this Indenture.

Section 6.06. Section 6.06 Conditional Waiver by Holders of Securities. Anything in this Indenture to the contrary notwithstanding, the Company may fail or omit in any particular instance to comply with a covenant or condition set forth herein with respect to any series of Securities if the Company shall have obtained and filed with the Trustee, prior to the time of such failure or omission, evidence (as provided in Article VIII) of the consent of the Holders of a majority in aggregate principal amount of the Securities of such series at the time Outstanding, either waiving such compliance in such instance or generally waiving compliance with such covenant or condition, but no such waiver shall extend to or affect such covenant or condition except to the extent so expressly waived, or impair any right consequent thereon and, until such waiver shall have become effective, the obligations of the Company and the duties of the Trustee in respect of any such covenant or condition shall remain in full force and effect.

Section 6.07. Statement by Officers as to Default. The Company shall deliver to the Trustee as soon as possible and in any event within 30 days after the Company becomes aware of the occurrence of any Event of Default or an event which, with the giving of notice or the lapse of time or both, would constitute an Event of Default, an Officer's Certificate setting forth the details of such Event of Default or Default and the action which the Company proposes to take with respect thereto.

ARTICLE VII

REMEDIES OF TRUSTEE AND SECURITYHOLDERS

Section 7.01. Events of Default. Except where otherwise indicated by the context or where the term is otherwise defined for a specific purpose, the term "Event of Default" as used in this Indenture with respect to Securities of any series shall mean one of the following described events unless it is either inapplicable to a particular series or it is specifically deleted or modified in the manner contemplated in Section 3.01:

(a) the failure of the Company to pay any installment of interest on any Security of such series when and as the same shall become payable, which failure shall have continued unremedied for a period of 90 days; provided, however, that a valid extension of an interest payment period by the Company in accordance with the terms of any indenture supplemental hereto shall not constitute a default in the payment of interest for this purpose;

(b) the failure of the Company to pay the principal of (and premium, if any, on) any Security of such series, when and as the same shall become payable, whether at Maturity as therein expressed, by call for redemption (otherwise than pursuant to a sinking fund), by declaration as authorized by this Indenture or otherwise;

(c) the failure of the Company to pay a sinking fund installment, if any, when and as the same shall become payable by the terms of a Security of such series, which failure shall have continued unremedied for a period of 30 days;

(d) the failure of the Company, subject to the provisions of Section 6.06, to perform any covenants or agreements contained in this Indenture (including any indenture supplemental hereto pursuant to which the Securities of such series were issued as contemplated by Section 3.01) (other than a covenant or agreement which has been expressly included in this Indenture solely for the benefit of a series of Securities other than that series and other than a covenant or agreement a default in the performance of which is elsewhere in this Section 7.01 specifically addressed), which failure shall not have been remedied, or without provision deemed to be adequate for the remedying thereof having been made, for a period of 90 days after written notice shall have been given to the Company by the Trustee or shall have been given to the Company and the Trustee by Holders of not less than a majority in aggregate principal amount of the Securities of such series then Outstanding, specifying such failure, requiring the Company to remedy the same and stating that such notice is a “**Notice of Default**” hereunder;

(e) the entry by a court having jurisdiction in the premises of a decree or order for relief in respect of the Company in an involuntary case under the federal bankruptcy laws, as now or hereafter constituted, or any other applicable federal or state bankruptcy, insolvency or other similar law now or hereafter in effect, or appointing a receiver, liquidator, assignee, custodian, trustee or sequestrator (or similar official) of the Company or of substantially all the property of the Company or ordering the winding-up or liquidation of its affairs and such decree or order shall remain unstayed and in effect for a period of 90 consecutive days;

(f) the commencement by the Company of a voluntary case under the federal bankruptcy laws, as now or hereafter constituted, or any other applicable federal or state bankruptcy, insolvency or other similar law now or hereafter in effect, or the consent by the Company to the entry of an order for relief in an involuntary case under any such law, or the consent by the Company to the appointment of or taking possession by a receiver, liquidator, assignee, trustee, custodian or sequestrator (or similar official) of the Company or of substantially all the property of the Company or the making by it of an assignment for the benefit of creditors or the admission by it in writing of its inability to pay its debts generally as they become due, or the taking of corporate action by the Company in furtherance of any action; or

(g) the occurrence of any other Event of Default with respect to Securities of such series as provided in Section 3.01; provided, however, that no event described in clause (d) or (other than with respect to a payment default) (g) above shall constitute an Event of Default hereunder until a Responsible Officer assigned to and working in the Trustee’s corporate trust department has actual knowledge thereof or until a written notice of any such event is received by the Trustee at the Corporate Trust Office, and such notice refers to the facts underlying such event, the Securities generally, the Company and the Indenture. Notwithstanding the foregoing provisions of this Section 7.01, if the principal or any premium or interest on any Security is payable in a Currency other than the Currency of the United States and such Currency is not available to the Company for making payment thereof due to the imposition of exchange controls or other circumstances beyond the control of the Company, the Company will be entitled to satisfy its obligations to Holders of the Securities by making such payment in the Currency of the United States in an amount equal to the Currency of the United States equivalent of the amount payable in such other Currency, as determined by the Company by reference to the noon buying rate in for cable transfers for such Currency (“Exchange Rate”), as such Exchange Rate is reported or otherwise made available by the Federal Reserve Bank of New York on the date of such payment, or, if such rate is not then available, on the basis of the most recently available Exchange Rate. Notwithstanding the foregoing provisions of this Section 7.01, any payment made under such circumstances in the Currency of the United States where the required payment is in a Currency other than the Currency of the United States will not constitute an Event of Default under this Indenture.

Section 7.02. Acceleration; Rescission and Annulment.

(a) Except as otherwise provided as contemplated by Section 3.01 with respect to any series of Securities, if any one or more of the above-described Events of Default (other than an Event of Default specified in Section 7.01(e) or 7.01(f)) shall happen with respect to Securities of any series at the time Outstanding, then, and in each and every such case, during the continuance of any such Event of Default, the Trustee or the Holders of not less than a majority in principal amount of the Securities of such series then Outstanding may declare the principal

(or, if the Securities of that series are Original Issue Discount Securities, such portion of the principal amount as may be specified in the terms of that series) of and all accrued but unpaid interest on all the Securities of such series then Outstanding to be due and payable immediately by a notice in writing to the Company (and to the Trustee if given by Holders), and upon any such declaration such principal amount (or specified amount) shall become immediately due and payable. If an Event of Default specified in Section 7.01(e) or 7.01(f) occurs and is continuing, then in every such case, the principal amount of all of the Securities of that series then Outstanding shall automatically, and without any declaration or any other action on the part of the Trustee or any Holder, become due and payable immediately. Upon payment of such amounts in the Currency in which such Securities are denominated (subject to Section 7.01 and except as otherwise provided pursuant to Section 3.01), all obligations of the Company in respect of the payment of principal of and interest on the Securities of such series shall terminate.

(b) The provisions of Section 7.02(a), however, are subject to the condition that, at any time after the principal of all the Securities of such series, to which any one or more of the above-described Events of Default is applicable, shall have been so declared to be due and payable, and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter provided in this Article, the Event of Default giving rise to such declaration of acceleration shall, without further act, be deemed to have been waived, and such declaration and its consequences shall, without further act, be deemed to have been rescinded and annulled, if:

(i) the Company has paid or deposited with the Trustee or Paying Agent a sum in the Currency in which such Securities are denominated (subject to Section 7.01 and except as otherwise provided pursuant to Section 3.01) sufficient to pay

(A) all amounts owing the Trustee and any predecessor trustee hereunder under Section 11.01(a) (provided, however, that all sums payable under this clause shall be paid in U.S. Dollars);

(B) all arrears of interest, if any, upon all the Securities of such series (with interest, to the extent that interest thereon shall be legally enforceable, on any overdue installment of interest at the rate borne by such Securities at the rate or rates prescribed therefor in such Securities); and

(C) the principal of and premium, if any, on any Securities of such series that have become due otherwise than by such declaration of acceleration and interest thereon; and

(ii) every other Default and Event of Default with respect to Securities of that series, other than the non-payment of the principal of Securities of that series which have become due solely by such declaration of acceleration, has been cured or waived as provided in Section 7.06.

(c) No such rescission shall affect any subsequent default or impair any right consequent thereon.

(d) For all purposes under this Indenture, if a portion of the principal of any Original Issue Discount Securities shall have been accelerated and declared due and payable pursuant to the provisions hereof, then, from and after such declaration, unless such declaration has been rescinded and annulled, the principal amount of such Original Issue Discount Securities shall be deemed, for all purposes hereunder, to be such portion of the principal thereof as shall be due and payable as a result of such acceleration, and payment of such portion of the principal thereof as shall be due and payable as a result of such acceleration, together with interest, if any, thereon and all other amounts owing thereunder, shall constitute payment in full of such Original Issue Discount Securities.

Section 7.03. Other Remedies. If the Company shall fail for a period of 30 days to pay any installment of interest on the Securities of any series or shall fail to pay the principal of and premium, if any, on any of the Securities of such series when and as the same shall become due and payable, whether at Maturity, or by call for redemption (other than pursuant to the sinking fund), by declaration as authorized by this Indenture, or otherwise, or shall fail for a period of 30 days to make any required sinking fund payment as to a series of Securities, then, upon

demand of the Trustee, the Company will pay to the Paying Agent for the benefit of the Holders of Securities of such series then Outstanding the whole amount which then shall have become due and payable on all the Securities of such series, with interest on the overdue principal and premium, if any, and (so far as the same may be legally enforceable) on the overdue installments of interest at the rate borne by the Securities of such series, and all amounts owing the Trustee and any predecessor trustee hereunder under Section 11.01(a).

In case the Company shall fail forthwith to pay such amounts upon such demand, the Trustee, in its own name and as trustee of an express trust, shall be entitled and empowered to institute any action or proceeding at law or in equity for the collection of the sums so due and unpaid, and may prosecute any such action or proceeding to judgment or final decree, and may enforce any such judgment or final decree against the Company or any other obligor upon the Securities of such series, and collect the moneys adjudged or decreed to be payable out of the property of the Company or any other obligor upon the Securities of such series, wherever situated, in the manner provided by law. Every recovery of judgment in any such action or other proceeding, subject to the payment to the Trustee of all amounts owing the Trustee and any predecessor trustee hereunder under Section 11.01(a), shall be for the ratable benefit of the Holders of such series of Securities which shall be the subject of such action or proceeding. All rights of action upon or under any of the Securities or this Indenture may be enforced by the Trustee without the possession of any of the Securities and without the production of any thereof at any trial or any proceeding relative thereto.

Section 7.04. Trustee as Attorney-in-Fact. The Trustee is hereby appointed, and each and every Holder of the Securities, by receiving and holding the same, shall be conclusively deemed to have appointed the Trustee, the true and lawful attorney-in-fact of such Holder, with authority to make or file (whether or not the Company shall be in Default in respect of the payment of the principal of, or interest on, any of the Securities), in its own name and as trustee of an express trust or otherwise as it shall deem advisable, in any receivership, insolvency, liquidation, bankruptcy, reorganization or other judicial proceeding relative to the Company or any other obligor upon the Securities or to their respective creditors or property, any and all claims, proofs of claim, proofs of debt, petitions, consents, other papers and documents and amendments of any thereof, as may be necessary or advisable in order to have the claims of the Trustee and any predecessor trustee hereunder and of the Holders of the Securities allowed in any such proceeding and to collect and receive any moneys or other property payable or deliverable on any such claim, and to execute and deliver any and all other papers and documents and to do and perform any and all other acts and things, as it may deem necessary or advisable in order to enforce in any such proceeding any of the claims of the Trustee and any predecessor trustee hereunder and of any of such Holders in respect of any of the Securities; and any receiver, assignee, trustee, custodian or debtor in any such proceeding is hereby authorized, and each and every taker or Holder of the Securities, by receiving and holding the same, shall be conclusively deemed to have authorized any such receiver, assignee, trustee, custodian or debtor, to make any such payment or delivery only to or on the order of the Trustee, and to pay to the Trustee any amount due it and any predecessor trustee hereunder under Section 11.01(a); provided, however, that nothing herein contained shall be deemed to authorize or empower the Trustee to consent to or accept or adopt, on behalf of any Holder of Securities, any plan of reorganization or readjustment affecting the Securities or the rights of any Holder thereof, or to authorize or empower the Trustee to vote in respect of the claim of any Holder of any Securities in any such proceeding.

Section 7.05. Priorities. Any moneys or properties collected by the Trustee with respect to a series of Securities under this Article VII shall be applied in the order following, at the date or dates fixed by the Trustee for the distribution of such moneys or properties and, in the case of the distribution of such moneys or properties on account of the Securities of any series, upon presentation of the Securities of such series, and stamping thereon the payment, if only partially paid, and upon surrender thereof, if fully paid:

First: To the payment of all amounts due to the Trustee and any predecessor trustee hereunder under Section 11.01(a).

Second: In case the principal of the Outstanding Securities of such series shall not have become due and be unpaid, to the payment of interest on the Securities of such series, in the chronological order of the Maturity of the installments of such interest, with interest (to the extent that such interest has been collected by the Trustee) upon the overdue installments of interest at the rate borne by such Securities, such payments to be made ratably to the Persons entitled thereto.

Third: In case the principal of the Outstanding Securities of such series shall have become due, by declaration or otherwise, to the payment of the whole amount then owing and unpaid upon the Securities of such series for principal and premium, if any, and interest, with interest on the overdue principal and premium, if any, and (to the extent that such interest has been collected by the Trustee) upon overdue installments of interest at the rate borne by the Securities of such series, and in case such moneys shall be insufficient to pay in full the whole amounts so due and unpaid upon the Securities of such series, then to the payment of such principal and premium, if any, and interest without preference or priority of principal and premium, if any, over interest, or of interest over principal and premium, if any, or of any installment of interest any other Security of such series, ratably to the aggregate of such principal and premium, if any, and accrued and unpaid interest.

Any surplus then remaining shall be paid to the Company or as directed by a court of competent jurisdiction.

Section 7.06. Control by Securityholders; Waiver of Past Defaults. The Holders of a majority in principal amount of the Securities of any series at the time outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee hereunder, or of exercising any trust or power hereby conferred upon the Trustee with respect to the Securities of such series, provided, however, that, subject to the provisions of Sections 11.01 and 11.02, the Trustee shall have the right to decline to follow any such direction if the Trustee being advised by counsel determines in good faith that the action so directed may not lawfully be taken or would be unduly prejudicial to Holders not joining in such direction or would involve the Trustee in personal liability. Prior to any declaration accelerating the Maturity of the Securities of any series, the Holders of a majority in aggregate principal amount of such series of Securities at the time Outstanding may on behalf of the Holders of all of the Securities of such series waive any past Default or Event of Default hereunder and its consequences except a Default in the payment of interest or any premium on or the principal of the Securities of such series. Upon any such waiver the Company, the Trustee and the Holders of the Securities of such series shall be restored to their former positions and rights hereunder, respectively; but no such waiver shall extend to any subsequent or other Default or Event of Default or impair any right consequent thereon. Whenever any Default or Event of Default hereunder shall have been waived as permitted by this Section 7.06, said Default or Event of Default shall for all purposes of the Securities of such series and this Indenture be deemed to have been cured and to be not continuing.

Section 7.07. Limitation on Suits. No Holder of any Security of any series shall have any right to institute any action, suit or proceeding at law or in equity for the execution of any trust hereunder or for the appointment of a receiver or for any other remedy hereunder, in each case with respect to an Event of Default with respect to such series of Securities, unless such Holder previously shall have given to the Trustee written notice of one or more of the Events of Default herein specified with respect to such series of Securities, and unless also the Holders of not less than a majority in principal amount of the Securities of such series then Outstanding shall have requested the Trustee in writing to take action in respect of the matter complained of, and unless also there shall have been offered to the Trustee security and indemnity satisfactory to it against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee, for 60 days after receipt of such notification, request and offer of indemnity, shall have neglected or refused to institute any such action, suit or proceeding; and such notification, request and offer of indemnity are hereby declared in every such case to be conditions precedent to any such action, suit or proceeding by any Holder of any Security of such series; it being understood and intended that no one or more of the Holders of Securities of such series shall have any right in any manner whatsoever by his, her, its or their action to enforce any right hereunder, except in the manner herein provided, and that every action, suit or proceeding at law or in equity shall be instituted, had and maintained in the manner herein provided and for the equal benefit of all Holders of the Outstanding Securities of such series; provided, however, that nothing in this Indenture or in the Securities of such series shall affect or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of, premium, if any, and interest on the Securities of such series to the respective Holders of such Securities at the respective due dates in such Securities stated, or affect or impair the right, which is also absolute and unconditional, of such Holders to institute suit to enforce the payment thereof.

Section 7.08. Undertaking for Costs. All parties to this Indenture and each Holder of any Security, by such Holder's acceptance thereof, shall be deemed to have agreed that any court may in its discretion require, in any action, suit or proceeding for the enforcement of any right or remedy under this Indenture, or in any action, suit or proceeding against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such action, suit or proceeding of an undertaking to pay the costs of such action, suit or proceeding, and that such

court may in its discretion assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in such action, suit or proceeding, having due regard to the merits and good faith of the claims or defenses made by such party litigant; provided, however, that the provisions of this Section 7.08 shall not apply to any action, suit or proceeding instituted by the Trustee, to any action, suit or proceeding instituted by any one or more Holders of Securities holding in the aggregate more than 10% in principal amount of the Securities of any series Outstanding, or to any action, suit or proceeding instituted by any Holder of Securities of any series for the enforcement of the payment of the principal of or premium, if any, or the interest on, any of the Securities of such series, on or after the respective due dates expressed in such Securities.

Section 7.09. Remedies Cumulative. No remedy herein conferred upon or reserved to the Trustee or to the Holders of Securities of any series is intended to be exclusive of any other remedy or remedies, and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute. No delay or omission of the Trustee or of any Holder of the Securities of any series to exercise any right or power accruing upon any Default or Event of Default shall impair any such right or power or shall be construed to be a waiver of any such Default or Event of Default or an acquiescence therein; and every power and remedy given by this Article VII to the Trustee and to the Holders of Securities of any series, respectively, may be exercised from time to time and as often as may be deemed expedient by the Trustee or by the Holders of Securities of such series, as the case may be. In case the Trustee or any Holder of Securities of any series shall have proceeded to enforce any right under this Indenture and the proceedings for the enforcement thereof shall have been discontinued or abandoned because of waiver or for any other reason or shall have been adjudicated adversely to the Trustee or to such Holder of Securities, then and in every such case the Company, the Trustee and the Holders of the Securities of such series shall severally and respectively be restored to their former positions and rights hereunder, and thereafter all rights, remedies and powers of the Trustee and the Holders of the Securities of such series shall continue as though no such proceedings had been taken, except as to any matters so waived or adjudicated.

ARTICLE VIII

CONCERNING THE SECURITYHOLDERS

Section 8.01. Evidence of Action of Securityholders. Whenever in this Indenture it is provided that the Holders of a specified percentage or a majority in aggregate principal amount of the Securities or of any series of Securities may take any action (including the making of any demand or request, the giving of any notice, consent or waiver or the taking of any other action), the fact that at the time of taking any such action the Holders of such specified percentage or majority have joined therein may be evidenced by (a) any instrument or any number of instruments of similar tenor executed by Securityholders in person, an agent or by a proxy appointed in writing, including through an electronic system for tabulating consents operated by the Depository for such series or otherwise (such action becoming effective, except as herein otherwise expressly provided, when such instruments or evidence of electronic consents are delivered to the Trustee and, where it is hereby expressly required, to the Company), or by the record of the Holders of Securities voting in favor thereof at any meeting of Securityholders duly called and held in accordance with the provisions of Article IX, or (c) by a combination of such instrument or instruments and any such record of such a meeting of Securityholders.

Section 8.02. Proof of Execution or Holding of Securities. Proof of the execution of any instrument by a Securityholder or his, her or its agent or proxy and proof of the holding by any Person of any of the Securities shall be sufficient if made in the following manner:

(a) The fact and date of the execution by any Person of any such instrument may be proved (i) by the certificate of any notary public or other officer in any jurisdiction who, by the laws thereof, has power to take acknowledgments or proof of deeds to be recorded within such jurisdiction, that the Person who signed such instrument did acknowledge before such notary public or other officer the execution thereof, (ii) by the affidavit of a witness of such execution sworn to before any such notary or other officer or (iii) in such other reasonable manner acceptable to the Trustee. Where such execution is by a Person acting in other than his or her individual capacity, such certificate or affidavit shall also constitute sufficient proof of his or her authority.

(b) The ownership of Securities of any series shall be proved by the Register of such Securities or by a certificate of the Registrar for such series.

(c) The record of any Holders' meeting shall be proved in the manner provided in Section 9.06.

(d) The Trustee may require such additional proof of any matter referred to in this Section 8.02 as it shall deem appropriate or necessary, so long as the request is a reasonable one.

(e) If the Company shall solicit from the Holders of Securities of any series any action, the Company may, at its option fix in advance a record date for the determination of Holders of Securities entitled to take such action, but the Company shall have no obligation to do so. Any such record date shall be fixed at the Company's discretion. If such a record date is fixed, such action may be sought or given before or after the record date, but only the Holders of Securities of record at the close of business on such record date shall be deemed to be Holders of Securities for the purpose of determining whether Holders of the requisite proportion of Outstanding Securities of such series have authorized or agreed or consented to such action, and for that purpose the Outstanding Securities of such series shall be computed as of such record date.

Section 8.03. Persons Deemed Owners

(a) The Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name any Security is registered as the owner of such Security for the purpose of receiving payment of principal of and premium, if any, and (subject to Section 3.08) interest, if any, on, such Security and for all other purposes whatsoever, whether or not such Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary. All payments made to any Holder, or upon his, her or its order, shall be valid, and, to the extent of the sum or sums paid, effectual to satisfy and discharge the liability for moneys payable upon such Security.

(b) None of the Company, the Trustee, any Paying Agent or the Registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in a Global Security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Section 8.04. Effect of Consents. After an amendment, supplement, waiver or other action becomes effective as to any series of Securities, a consent to it by a Holder of such series of Securities is a continuing consent conclusive and binding upon such Holder and every subsequent Holder of the same Securities or portion thereof, and of any Security issued upon the transfer thereof or in exchange therefor or in place thereof, even if notation of the consent is not made on any such Security. An amendment, supplement or waiver becomes effective in accordance with its terms and thereafter binds every Holder.

ARTICLE IX

SECURITYHOLDERS' MEETINGS

Section 9.01. Purposes of Meetings. A meeting of Securityholders of any or all series may be called at any time and from time to time pursuant to the provisions of this Article IX for any of the following purposes:

(a) to give any notice to the Company or to the Trustee, or to give any directions to the Trustee, or to consent to the waiving of any Default or Event of Default hereunder and its consequences, or to take any other action authorized to be taken by Securityholders pursuant to any of the provisions of Article VIII;

(b) to remove the Trustee and nominate a successor trustee pursuant to the provisions of Article XI;

(c) to consent to the execution of an Indenture or of indentures supplemental hereto pursuant to the provisions of Section 14.02; or

(d) to take any other action authorized to be taken by or on behalf of the Holders of any specified aggregate principal amount of the Securities of any one or more or all series, as the case may be, under any other provision of this Indenture or under applicable law.

Section 9.02. Call of Meetings by Trustee. The Trustee may at any time call a meeting of all Securityholders of all series that may be affected by the action proposed to be taken, to take any action specified in Section 9.01, to be held at such time and at such place in New York, New York or in Atlanta, Georgia. Notice of every meeting of the Securityholders of a series, setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting, shall be mailed to Holders of Securities of such series at their addresses as they shall appear on the Register of the Company. Such notice shall be mailed not less than 20 nor more than 180 days prior to the date fixed for the meeting.

Section 9.03. Call of Meetings by Company or Securityholders. In case at any time the Company or the Holders of at least 10% in aggregate principal amount of the Securities of a series (or of all series, as the case may be) then Outstanding that may be affected by the action proposed to be taken, shall have requested the Trustee to call a meeting of Securityholders of such series (or of all series), by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have mailed the notice of such meeting within 20 days after receipt of such request, then the Company or such Securityholders may determine the time and the place for such meeting and may call such meeting to take any action authorized in Section 9.01, by mailing notice thereof as provided in Section 9.02.

Section 9.04. Qualifications for Voting. To be entitled to vote at any meeting of Securityholders, a Person shall (a) be a Holder of one or more Securities affected by the action proposed to be taken at the meeting or (b) be a Person appointed by an instrument in writing as proxy by a Holder of one or more such Securities. The only Persons who shall be entitled to be present or to speak at any meeting of Securityholders shall be the Persons entitled to vote at such meeting and their counsel and any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

Section 9.05. Regulation of Meetings.

(a) Notwithstanding any other provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Securityholders, in regard to proof of the holding of Securities and of the appointment of proxies, and in regard to the appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall deem fit.

(b) The Trustee shall, by an instrument in writing, appoint a temporary chairman of the meeting, unless the meeting shall have been called by the Company or by Securityholders as provided in Section 9.03, in which case the Company or the Securityholders calling the meeting, as the case may be, shall in like manner appoint a temporary chair. A permanent chairman and a permanent secretary of the meeting shall be elected by majority vote of the meeting.

(c) At any meeting of Securityholders of a series, each Securityholder of such series of such Securityholder's proxy shall be entitled to one vote for each \$1,000 principal amount of Securities of such series Outstanding held or represented by him; provided, however, that no vote shall be cast or counted at any meeting in respect of any Security challenged as not Outstanding and ruled by the chairman of the meeting to be not Outstanding. The chairman of the meeting shall have no right to vote other than by virtue of Securities of such series held by him or her or instruments in writing as aforesaid duly designating him or her as the Person to vote on behalf of other Securityholders. At any meeting of the Securityholders duly called pursuant to the provisions of Section 9.02 or Section 9.03 the presence of Persons holding or representing Securities in an aggregate principal amount sufficient to take action upon the business for the transaction of which such meeting was called shall be necessary to constitute a quorum, and any such meeting may be adjourned from time to time by a majority of those present, whether or not constituting a quorum, and the meeting may be held as so adjourned without further notice.

In the absence of a quorum within 30 minutes of the time appointed for any such meeting, the meeting shall, if convened at the request of holders of Securities of such series, be dissolved. In any other case, the meeting may be adjourned for a period determined by the chairman of the meeting prior to the adjournment of such meeting. In the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for a period determined by the chairman of the meeting prior to the adjournment of such adjourned meeting. Notice of the reconvening of any adjourned meeting shall be given as provided in Section 9.02 hereof, except that such notice need be given only once and not less than five days prior to the date on which the meeting is scheduled to be reconvened.

Section 9.06. Voting. The vote upon any resolution submitted to any meeting of Securityholders of a series shall be by written ballots on which shall be subscribed the signatures of the Holders of Securities of such series or of their representatives by proxy and the principal amounts of the Securities of such series held or represented by them. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports in duplicate of all votes cast at the meeting. A record in duplicate of the proceedings of each meeting of Securityholders shall be prepared by the secretary of the meeting and there shall be attached to said record the original reports of the inspectors of votes on any vote by ballot taken thereat and affidavits by one or more Persons having knowledge of the facts setting forth a copy of the notice of the meeting and showing that said notice was mailed as provided in Section 9.02. The record shall show the principal amounts of the Securities voting in favor of or against any resolution. The record shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one of the duplicates shall be delivered to the Company and the other to the Trustee to be preserved by the Trustee.

Any record so signed and verified shall be conclusive evidence of the matters therein stated.

Section 9.07. No Delay of Rights by Meeting. Nothing contained in this Article IX shall be deemed or construed to authorize or permit, by reason of any call of a meeting of Securityholders of any series or any rights expressly or impliedly conferred hereunder to make such call, any hindrance or delay in the exercise of any right or rights conferred upon or reserved to the Trustee or to the Securityholders of such series under any of the provisions of this Indenture or of the Securities of such series.

ARTICLE X

REPORTS BY THE COMPANY AND THE TRUSTEE AND SECURITYHOLDERS' LISTS

Section 10.01. Reports by Trustee.

(a) So long as any Securities are outstanding, the Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required pursuant to the Trust Indenture Act at the times and in the manner provided therein.

(b) The Trustee shall, at the time of the transmission to the Holders of Securities of any report pursuant to the provisions of this Section 10.01, file a copy of such report with each stock exchange upon which the Securities are listed, if any, and also with the SEC in respect of a Security listed and registered on a national securities exchange, if any. The Company agrees to notify the Trustee when, as and if the Securities become listed on any stock exchange.

The Company will reimburse the Trustee for all expenses incurred in the preparation and transmission of any report pursuant to the provisions of this Section 10.01 and of Section 10.02.

Section 10.02. Reports by the Company. The Company shall file with the Trustee and the SEC, and transmit to Holders, such information, documents and other reports, and such summaries thereof, as may be required pursuant to the Trust Indenture Act at the times and in the manner provided in the Trust Indenture Act; provided that, unless available on EDGAR, any such information, documents or reports required to be filed with the SEC

pursuant to Section 13 or 15(d) of the Exchange Act shall be filed with the Trustee within 30 days after the same is filed with the SEC; and provided further, that the filing of the reports specified in Section 13 or 15(d) of the Exchange Act by an entity that is the direct or indirect parent of the Company will satisfy the requirements of this Section 10.02 so long as such entity is an obligor or guarantor on the Securities; and provided further that the reports of such entity will not be required to include condensed consolidating financial information for the Company in a footnote to the financial statements of such entity. Notwithstanding the foregoing, the Company shall not be required to deliver to the Trustee any information or documents for which the Company has requested and received confidential treatment by the SEC.

Section 10.03. Securityholders' Lists. The Trustee will preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of all Holders of Securities and shall otherwise comply with TIA Section 312(a). If the Trustee is not the Registrar, the Company will furnish to the Trustee at least seven Business Days before each Interest Payment Date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of the Holders of Securities and the Company shall otherwise comply with TIA Section 312(a).

ARTICLE XI

CONCERNING THE TRUSTEE

Section 11.01. Rights of Trustees: Compensation and Indemnity. The Trustee accepts the trusts created by this Indenture upon the terms and conditions hereof, including the following, to all of which the parties hereto and the Holders from time to time of the Securities agree:

(a) The Trustee shall be entitled to such compensation as the Company and the Trustee shall from time to time agree in writing for all services rendered by it hereunder (including in any agent capacity in which it acts). The compensation of the Trustee shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust. The Company shall reimburse the Trustee promptly upon its request for all reasonable out-of-pocket expenses, disbursements and advances incurred or made by the Trustee (including the reasonable expenses and disbursements of its agents and counsel), except any such expense, disbursement or advance as may be attributable to its negligence, bad faith or willful misconduct.

The Company also agrees to indemnify each of the Trustee and any predecessor Trustee hereunder, including the directors, officers, employees, agents of the Trustee and any predecessor Trustee, for, and to hold it harmless against, any and all loss, liability, damage, claim, or expense incurred without its own negligence, bad faith or willful misconduct, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder and the performance of its duties (including in any agent capacity in which it acts), as well as the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder, except those attributable to its negligence, willful misconduct or bad faith. The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have one separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent shall not be unreasonably withheld.

As security for the performance of the obligations of the Company under this Section 11.01(a), the Trustee shall have a lien upon all property and funds held or collected by the Trustee as such, except funds held in trust by the Trustee to pay principal of and interest on any Securities. Notwithstanding any provisions of this Indenture to the contrary, the obligations of the Company to compensate and indemnify the Trustee under this Section 11.01(a) shall survive the resignation or removal of the Trustee and any satisfaction and discharge under Article XII. When the Trustee incurs expenses or renders services after an Event of Default specified in clause (e) or (f) of Section 7.01 occurs, the expenses and compensation for the services are intended to constitute expenses of administration under any applicable federal or state bankruptcy, insolvency or similar laws.

(b) The Trustee may execute any of the trusts or powers hereof and perform any duty hereunder either directly or by its agents and attorneys and shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder.

(c) The Trustee shall not be responsible in any manner whatsoever for the correctness of the recitals herein or in the Securities (except its certificates of authentication thereon) contained, all of which are made solely by the Company; and the Trustee shall not be responsible or accountable in any manner whatsoever for or with respect to the validity or execution or sufficiency of this Indenture or of the Securities (except its certificates of authentication thereon), and the Trustee makes no representation with respect thereto, except that the Trustee represents that it is duly authorized to execute and deliver this Indenture, authenticate the Securities and perform its obligations hereunder and that the statements made by it in a Statement of Eligibility on Form T-1 supplied to the Company are true and accurate, subject to the qualifications set forth therein. The Trustee shall not be accountable for the use or application by the Company of any Securities, or the proceeds of any Securities, authenticated and delivered by the Trustee in conformity with the provisions of this Indenture.

(d) The Trustee may consult with counsel of its selection, and, to the extent permitted by Section 11.02, any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken or suffered by the Trustee hereunder in good faith and in accordance with such Opinion of Counsel.

(e) The Trustee, to the extent permitted by Section 11.02, may rely upon the certificate of the Secretary or one of the Assistant Secretaries of the Company as to the adoption of any Board Resolution or resolution of the stockholders of the Company, and any request, direction, order or demand of the Company mentioned herein shall be sufficiently evidenced by, and whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee may rely upon, an Officer's Certificate of the Company (unless other evidence in respect thereof be herein specifically prescribed).

(f) Subject to Section 11.04, the Trustee or any agent of the Trustee, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Sections 310(b) and 311 of the Trust Indenture Act, may otherwise deal with the Company with the same rights it would have had if it were not the Trustee or such agent.

(g) Money held by the Trustee in trust hereunder need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed in writing with the Company.

(h) Any action taken by the Trustee pursuant to any provision hereof at the request or with the consent of any Person who at the time is the Holder of any Security shall be conclusive and binding in respect of such Security upon all future Holders thereof or of any Security or Securities which may be issued for or in lieu thereof in whole or in part, whether or not such Security shall have noted thereon the fact that such request or consent had been made or given.

(i) Subject to the provisions of Section 11.02, the Trustee may conclusively rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, debenture or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties.

(j) Subject to the provisions of Section 11.02, the Trustee shall not be under any obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order or direction of any of the Holders of the Securities, pursuant to any provision of this Indenture, unless one or more of the Holders of the Securities shall have offered to the Trustee security or indemnity satisfactory to it against the costs, expenses and liabilities which may be incurred by it therein or thereby.

(k) Subject to the provisions of Section 11.02, the Trustee shall not be liable for any action taken or omitted by it in good faith and believed by it to be authorized or within its discretion or within the rights or powers conferred upon it by this Indenture.

(l) Subject to the provisions of Section 11.02, the Trustee shall not be deemed to have knowledge or notice of any Default or Event of Default unless a Responsible Officer of the Trustee has actual

knowledge thereof or unless the Holders of not less than 25% of the Outstanding Securities notify the Trustee thereof.

(m) Subject to the provisions of the first paragraph of Section 11.02, the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of Indebtedness or other paper or document, but the Trustee, may, but shall not be required to, make further inquiry or investigation into such facts or matters as it may see fit.

(n) The rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder.

(o) Permissive rights of the Trustee hereunder shall not constitute performance duties.

(p) No Depositary shall be deemed an agent of the Trustee, and the Trustee shall not be responsible for any act or omission by any Depositary.

(q) The rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and each agent, custodian and other Person employed to act hereunder;

Section 11.02. Duties of Trustee.

(a) If one or more of the Events of Default specified in Section 7.01 with respect to the Securities of any series shall have happened, then, during the continuance thereof, the Trustee shall, with respect to such Securities, exercise such of the rights and powers vested in it by this Indenture, and shall use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

(b) None of the provisions of this Indenture shall be construed as relieving the Trustee from liability for its own negligent action, its own negligent action, negligent failure to act, or its own willful misconduct, except that, anything in this Indenture contained to the contrary notwithstanding,

(i) unless and until an Event of Default specified in Section 7.01 with respect to the Securities of any series shall have happened which at the time is continuing,

(A) the Trustee undertakes to perform such duties and only such duties with respect to the Securities of that series as are specifically set out in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee, whose duties and obligations shall be determined solely by the express provisions of this Indenture; and

(B) the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, in the absence of bad faith on the part of the Trustee, upon certificates and opinions furnished to it pursuant to the express provisions of this Indenture; but in the case of any such certificates or opinions which, by the provisions of this Indenture, are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculations or other facts, statements, opinions or conclusions stated therein);

(ii) the Trustee shall not be liable to any Holder of Securities or to any other Person for any error of judgment made in good faith by a Responsible Officer or Officers of the Trustee, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(iii) the Trustee shall not be liable to any Holder of Securities or to any other Person with respect to any action taken or omitted to be taken by it in good faith, in accordance with the direction of Securityholders given as provided in Section 7.06, relating to the time, method and place of conducting any proceeding for any remedy available to it or exercising any trust or power conferred upon it by this Indenture;

(iv) in no event shall the Trustee be responsible or liable for special, indirect, or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action; and

(v) in no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

(c) None of the provisions of this Indenture shall require the Trustee to expend or risk its own funds or otherwise to incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it. The Trustee shall not be required to give and note, bond or surety in respect of the trusts and powers under this Indenture.

(d) Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section 11.02.

Section 11.03. Notice of Defaults. Within 90 days after the occurrence thereof, and if known to the Trustee, the Trustee shall give to the Holders of the Securities of a series notice of each Default or Event of Default with respect to the Securities of such series known to the Trustee, by transmitting such notice to Holders at their addresses as the same shall then appear on the Register of the Company, unless such Default shall have been cured or waived before the giving of such notice (the term "Default" being hereby defined to be the events specified in Section 7.01, which are, or after notice or lapse of time or both would become, Events of Default as defined in said Section). Except in the case of a Default or Event of Default in payment of the principal of, premium, if any, or interest on any of the Securities of such series when and as the same shall become payable, or to make any sinking fund payment as to Securities of the same series, the Trustee shall be protected in withholding such notice, if and so long as a Responsible Officer or Responsible Officers of the Trustee in good faith determines that the withholding of such notice is in the interests of the Holders of the Securities of such series.

Section 11.04. Eligibility; Disqualification.

(a) The Trustee shall at all times satisfy the requirements of TIA Section 310(a). The Trustee shall have a combined capital and surplus of at least \$50 million as set forth in its most recent published annual report of condition, and shall have a Corporate Trust Office. If at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section 11.04, it shall resign immediately in the manner and with the effect hereinafter specified in this Article.

(b) The Trustee shall comply with TIA Section 310(b); provided, however, that there shall be excluded from the operation of TIA Section 310(b)(i) any indenture or indentures under which other securities or certificates of interest or participation in other securities of the Company are outstanding if the requirements for such exclusion set forth in TIA Section 310(b)(i) are met. If the Trustee has or shall acquire a conflicting interest within the meaning of Section 310(b) of the Trust Indenture Act, the Trustee shall either eliminate such interest or resign, to the extent and in the manner provided by, and subject to the provisions of, the Trust Indenture Act and this Indenture. If Section 310(b) of the Trust Indenture Act is amended any time after the date of this Indenture to change the circumstances under which a Trustee shall be deemed to have a conflicting interest with respect to the Securities of any series or to change any of the definitions in connection therewith, this Section 11.04 shall be automatically amended to incorporate such changes.

Section 11.05. Registration and Notice; Removal. The Trustee, or any successor to it hereafter appointed, may at any time resign and be discharged of the trusts hereby created with respect to any one or more or all series of Securities by giving to the Company notice in writing. Such resignation shall take effect upon the appointment of a successor Trustee and the acceptance of such appointment by such successor Trustee. Any Trustee hereunder may be removed with respect to any series of Securities at any time by the filing with such Trustee and the delivery to the Company of an instrument or instruments in writing signed by the Holders of a majority in principal amount of the Securities of such series then Outstanding, specifying such removal and the date when it shall become effective.

If at any time:

(1) the Trustee shall fail to comply with the provisions of TIA Section 310(b) after written request therefor by the Company or by any Holder who has been a bona fide Holder of a Security for at least six months, or

(2) the Trustee shall cease to be eligible under Section 11.04 and shall fail to resign after written request therefor by the Company or by any Holder who has been a bona fide Holder of a Security for at least six months, or

(3) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation, then, in any such case, (i) the Company by written notice to the Trustee may remove the Trustee and appoint a successor Trustee with respect to all Securities, or (ii) subject to TIA Section 315(c), any Securityholder who has been a bona fide Holder of a Security for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

Upon its resignation or removal, any Trustee shall be entitled to the payment of reasonable compensation for the services rendered hereunder by such Trustee and to the payment of all reasonable expenses incurred hereunder and all moneys then due to it hereunder. The Trustee's rights to indemnification provided in Section 11.01(a) shall survive its resignation or removal.

Section 11.06. Successor Trustee by Appointment.

(a) In case at any time the Trustee shall resign, or shall be removed (unless the Trustee shall be removed as provided in Section 11.04(b), in which event the vacancy shall be filled as provided in said subdivision), or shall become incapable of acting, or shall be adjudged bankrupt or insolvent, or if a receiver of the Trustee or of its property shall be appointed, or if any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation with respect to the Securities of one or more series, a successor Trustee with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any series) may be appointed by the Holders of a majority in principal amount of the Securities of that or those series then Outstanding, by an instrument or instruments in writing signed in duplicate by such Holders and filed, one original thereof with the Company and the other with the successor Trustee; but, until a successor Trustee shall have been so appointed by the Holders of Securities of that or those series as herein authorized, the Company, or, in case all or substantially all the assets of

the Company shall be in the possession of one or more custodians or receivers lawfully appointed, or of trustees in bankruptcy or reorganization proceedings (including a trustee or trustees appointed under the provisions of the federal bankruptcy laws, as now or hereafter constituted), or of assignees for the benefit of creditors, such receivers, custodians, trustees or assignees, as the case may be, by an instrument in writing, shall appoint a successor Trustee with respect to the Securities of such series. Subject to the provisions of Sections 11.04 and 11.05, upon the appointment as aforesaid of a successor Trustee with respect to the Securities of any series, the Trustee with respect to the Securities of such series shall cease to be Trustee hereunder. After any such appointment other than by the Holders of Securities of that or those series, the Person making such appointment shall forthwith cause notice thereof to be mailed to the Holders of Securities of such series at their addresses as the same shall then appear on the Register of the Company but any successor Trustee with respect to the Securities of such series so appointed shall, immediately and without further act, be superseded by a successor Trustee appointed by the Holders of Securities of such series in the manner above prescribed, if such appointment be made prior to the expiration of one year from the date of the mailing of such notice by the Company, or by such receivers, trustees or assignees.

(b) If any Trustee with respect to the Securities of one or more series shall resign or be removed and a successor Trustee shall not have been appointed by the Company or by the Holders of the Securities of such series or, if any successor Trustee so appointed shall not have accepted its appointment within 30 days after such appointment shall have been made, the resigning Trustee at the expense of the Company may apply to any court of competent jurisdiction for the appointment of a successor Trustee. If in any other case a successor Trustee shall not be appointed pursuant to the foregoing provisions of this Section 11.06 within three months after such appointment might have been made hereunder, the Holder of any Security of the applicable series or any retiring Trustee at the expense of the Company may apply to any court of competent jurisdiction to appoint a successor Trustee. Such court may thereupon, in any such case, after such notice, if any, as such court may deem proper and prescribe, appoint a successor Trustee.

(c) Any successor Trustee appointed hereunder with respect to the Securities of one or more series shall execute, acknowledge and deliver to its predecessor Trustee and to the Company, or to the receivers, trustees, assignees or court appointing it, as the case may be, an instrument accepting such appointment hereunder, and thereupon such successor Trustee, without any further act, deed or conveyance, shall become vested with all the authority, rights, powers, trusts, immunities, duties and obligations with respect to such series of such predecessor Trustee with like effect as if originally named as Trustee hereunder, and such predecessor Trustee, upon payment of its charges and disbursements then unpaid, shall thereupon become obligated to pay over, and such successor Trustee shall be entitled to receive, all moneys and properties held by such predecessor Trustee as Trustee hereunder, subject nevertheless to its lien provided for in Section 11.01(a). Nevertheless, on the written request of the Company or of the successor Trustee or of the Holders of at least 10% in principal amount of the Securities of such series then Outstanding, such predecessor Trustee, upon payment of its said charges and disbursements, shall execute and deliver an instrument transferring to such successor Trustee upon the trusts herein expressed all the rights, powers and trusts of such predecessor Trustee and shall assign, transfer and deliver to the successor Trustee all moneys and properties held by such predecessor Trustee, subject nevertheless to its lien provided for in Section 11.01(a); and, upon request of any such successor Trustee and the Company shall make, execute, acknowledge and deliver any and all instruments in writing for more fully and effectually vesting in and confirming to such successor Trustee all such authority, rights, powers, trusts, immunities, duties and obligations.

Section 11.07. Successor Trustee by Merger. Any Person into which the Trustee or any successor to it in the trusts created by this Indenture shall be merged or converted, or any Person with which it or any successor to it shall be consolidated, or any Person resulting from any merger, conversion or consolidation to which the Trustee or any such successor to it shall be a party, or any Person to which the Trustee or any successor to it shall sell or otherwise transfer all or substantially all of the corporate trust business of the Trustee, shall be the successor Trustee under this Indenture without the execution or filing of any paper or any further act on the part of any of the parties hereto; provided that such Person shall be otherwise qualified and eligible under this Article. In case at the time such successor to the Trustee shall succeed to the trusts created by this Indenture with respect to one or more series of Securities, any of such Securities shall have been authenticated but not delivered by the Trustee then in office, any successor to such Trustee may adopt the certificate of authentication of any predecessor Trustee, and deliver such Securities so authenticated; and in case at that time any of the Securities shall not have been authenticated, any successor to the Trustee may authenticate such Securities either in the name of any predecessor hereunder or in the name of the successor Trustee; and in all such cases such certificates shall have the full force which it is anywhere in

the Securities or in this Indenture provided that the certificate of the Trustee shall have; provided, however, that the right to adopt the certificate of authentication of any predecessor Trustee or authenticate Securities in the name of any predecessor Trustee shall apply only to its successor or successors by merger, conversion or consolidation.

Section 11.08. Right to Rely on Officer's Certificate. Subject to Section 11.02, and subject to the provisions of Section 16.01 with respect to the certificates required thereby, whenever in the administration of the provisions of this Indenture the Trustee shall deem it necessary or desirable that a matter be proved or established prior to taking or suffering any action hereunder, such matter (unless other evidence in respect thereof be herein specifically prescribed) may, in the absence of negligence, bad faith or willful misconduct on the part of the Trustee, be deemed to be conclusively proved and established by an Officer's Certificate with respect thereto delivered to the Trustee, and such Officer's Certificate, in the absence of negligence, bad faith or willful misconduct on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted by it under the provisions of this Indenture upon the faith thereof.

Section 11.09. Appointment of Authenticating Agent. The Trustee may appoint an agent (the "Authenticating Agent") reasonably acceptable to the Company to authenticate the Securities, and the Trustee shall give written notice of such appointment to all Holders of Securities of the series with respect to which such Authenticating Agent will serve. Unless limited by the terms of such appointment, any such Authenticating Agent may authenticate Securities whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by the Authenticating Agent. Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder.

Each Authenticating Agent shall at all times be a corporation organized and doing business and in good standing under the laws of the United States, any State thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by Federal or State authority. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Article XI, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Article XI, it shall resign immediately in the manner and with the effect specified in this Article XI.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, provided such corporation shall be otherwise eligible under this Article XI, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent. An Authenticating Agent may resign at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section 11.09, the Trustee may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give written notice of such appointment to all Holders of Securities of the series with respect to which such Authenticating Agent will serve. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section 11.09.

The Trustee agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section 11.09, and the Trustee shall be entitled to be reimbursed for such payments, subject to the provisions of Section 11.01.

Section 11.10. Communications by Securityholders with Other Securityholders. Holders of Securities may communicate pursuant to Section 312(b) of the Trust Indenture Act with other Holders with respect to their

rights under this Indenture or the Securities. The Company, the Trustee, the Registrar and anyone else shall have the protection of Section 312(c) of the Trust Indenture Act with respect to such communications.

ARTICLE XII

SATISFACTION AND DISCHARGE; DEFEASANCE

Section 12.01. Applicability of Article. If, pursuant to Section 3.01, provision is made for the defeasance of Securities of a series and if the Securities of such series are denominated and payable only in U.S. Dollars (except as provided pursuant to Section 3.01), then the provisions of this Article shall be applicable except as otherwise specified pursuant to Section 3.01 for Securities of such series. Defeasance provisions, if any, for Securities denominated in a Foreign Currency may be specified pursuant to Section 3.01.

Section 12.02. Satisfaction and Discharge of Indenture. This Indenture, with respect to the Securities of any series (if all series issued under this Indenture are not to be affected), shall, upon Company Order, cease to be of further effect (except as to any surviving rights of registration of transfer or exchange of such Securities herein expressly provided for and rights to receive payments of principal of and premium, if any, and interest on such Securities) and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when,

(a) either:

(i) all Securities of such series theretofore authenticated and delivered (other than (A) Securities that have been destroyed, lost or stolen and that have been replaced or paid as provided in Section 3.07 and (B) Securities for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 6.03) have been delivered to the Trustee for cancellation; or

(ii) all Securities of such series not theretofore delivered to the Trustee for cancellation,

(A) have become due and payable, or

(B) will become due and payable at their Stated Maturity within one year, or

(C) are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice by the Trustee in the name, and at the expense, of the Company, and the Company,

and in the case of (A), (B) or (C) above, has deposited or caused to be deposited with the Trustee or Paying Agent as trust funds in trust for the purpose an amount in the Currency in which such Securities are denominated (except as otherwise provided pursuant to Section 3.01) sufficient to pay and discharge the entire Indebtedness on such Securities for principal and premium, if any, and interest to the date of such deposit (in the case of Securities that have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be; provided, however, in the event a petition for relief under federal bankruptcy laws, as now or hereafter constituted, or any other applicable federal or state bankruptcy, insolvency or other similar law, is filed with respect to the Company within 91 days after the deposit and the Trustee is required to return the moneys then on deposit with the Trustee to the Company, the obligations of the Company under this Indenture with respect to such Securities shall not be deemed terminated or discharged;

(b) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(c) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture with respect to such series have been complied with. Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 11.01 and, if money shall have been deposited with the Trustee pursuant to subclause (B) of clause (a)(i) of this Section, the obligations of the Trustee under Section 12.06 and the last paragraph of Section 6.03(e) shall survive.

Section 12.03. Defeasance upon Deposit of Moneys or U.S Government Obligations. At the Company's option, either (a) the Company shall be deemed to have been Discharged (as defined below) from its obligations with respect to Securities of any series on the first day after the applicable conditions set forth below have been satisfied or (b) the Company shall cease to be under any obligation to comply with any term, provision or condition set forth in Section 6.04 with respect to Securities of any series (and, if so specified pursuant to Section 3.01, any other restrictive covenant added for the benefit of such series pursuant to Section 3.01) at any time after the applicable conditions set forth below have been satisfied:

(a) The Company shall have deposited or caused to be deposited irrevocably with the Trustee as trust funds in trust, specifically pledged as security for, and dedicated solely to, the benefit of the Holders of the Securities of such series money in an amount, or (ii) U.S. Government Obligations (as defined below) that through the payment of interest and principal in respect thereof in accordance with their terms will provide, not later than one day before the due date of any payment, money in an amount, or (iii) a combination of (i) and (ii), sufficient to pay and discharge each installment of principal (including any mandatory sinking fund payments) of and premium, if any, and interest on, the Outstanding Securities of such series on the dates such installments of interest or principal and premium are due;

(b) No Default with respect to the Securities of such series shall have occurred and be continuing on the date of such deposit (other than a Default resulting from the borrowing of funds and the grant of any related liens to be applied to such deposit); and

(c) The Company shall have delivered to the Trustee an Opinion of Counsel to the effect that Holders of the Securities of such series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the Company's exercise of its option under this Section and will be subject to federal income tax on the same amounts and in the same manner and at the same times as would have been the case if such action had not been exercised and, in the case of the Securities of such series being Discharged accompanied by a ruling to that effect received from or published by the Internal Revenue Service.

"Discharged" means that the Company shall be deemed to have paid and discharged the entire Indebtedness represented by, and obligations under, the Securities of such series and to have satisfied all the obligations under this Indenture relating to the Securities of such series (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), except the rights of Holders of Securities of such series to receive, from the trust fund described in clause (a) above, payment of the principal of and premium, if any, and interest on such Securities when such payments are due, the Company's obligations with respect to Securities of such series under Sections 3.04, 3.06, 3.07, 6.02 and 12.06 and (C) the rights, powers, trusts, duties and immunities of the Trustee hereunder.

"U.S. Government Obligations" means securities that are (i) direct obligations of the United States for the payment of which its full faith and credit is pledged or (ii) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States, that, in either case under clauses (i) or (ii) are not callable or redeemable at the action of the issuer thereof, and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such U.S. Government Obligation or a specific payment of interest on or principal of any such U.S. Government Obligation held by such custodian for the account of the holder of a depository receipt; provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of interest on or principal of the U.S. Government Obligation evidenced by such depository receipt.

Section 12.04. Repayment to Company. The Trustee and any Paying Agent shall promptly pay to the Company (or to its designee) upon Company Order any excess moneys or U.S. Government Obligations held by them at any time. The provisions of the last paragraph of Section 6.03 shall apply to any money held by the Trustee or any Paying Agent under this Article that remains unclaimed for two years after the Maturity of any series of Securities for which money or U.S. Government Obligations have been deposited pursuant to Section 12.03.

Section 12.05. Indemnity for U.S Government Obligations. The Company shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the deposited U.S. Government Obligations or the principal or interest received on such U.S. Government Obligations.

Section 12.06. Application of Trust Money.

(a) Subject to any applicable abandoned property law, neither the Trustee nor any other paying agent shall be required to pay interest on any moneys deposited pursuant to the provisions of this Indenture, except such as it shall agree with the Company in writing to pay thereon. Any moneys so deposited for the payment of the principal of, or premium, if any, or interest on the Securities of any series and remaining unclaimed for two years after the date of the maturity of the Securities of such series or the date fixed for the redemption of all the Securities of such series at the time outstanding, as the case may be, shall be repaid by the Trustee or such other paying agent to the Company upon its written request and thereafter, anything in this Indenture to the contrary notwithstanding, any rights of the Holders of Securities of such series in respect of which such moneys shall have been deposited shall be enforceable only against the Company, and all liability of the Trustee or such other paying agent with respect to such moneys shall thereafter cease.

(b) Subject to the provisions of the foregoing paragraph, any moneys which at any time shall be deposited by the Company or on its behalf with the Trustee or any other paying agent for the purpose of paying the principal of, premium, if any, and interest on any of the Securities shall be and are hereby assigned, transferred and set over to the Trustee or such other paying agent in trust for the respective Holders of the Securities for the purpose for which such moneys shall have been deposited; but such moneys need not be segregated from other funds except to the extent required by law.

Section 12.07. Deposits of Non-U.S. Currencies. Notwithstanding the foregoing provisions of this Article, if the Securities of any series are payable in a Currency other than U.S. Dollars, the Currency or the nature of the government obligations to be deposited with the Trustee or paying agent under the foregoing provisions of this Article shall be as set forth in the Officer's Certificate or established in the supplemental indenture under which the Securities of such series are issued.

ARTICLE XIII

IMMUNITY OF CERTAIN PERSONS

Section 13.01. No Personal Liability. No recourse shall be had for the payment of the principal of, or the premium, if any, or interest on, any Security or for any claim based thereon or otherwise in respect thereof or of the Indebtedness represented thereby, or upon any obligation, covenant or agreement of this Indenture, against any incorporator, stockholder, officer or director, as such, past, present or future, of the Company or of any successor corporation, either directly or through the Company or any successor corporation, whether by virtue of any constitutional provision, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly agreed and understood that this Indenture and the Securities are solely corporate obligations, and that no personal liability whatsoever shall attach to, or be incurred by, any incorporator, stockholder, officer or director, as such, past, present or future, of the Company or of any successor corporation, either directly or through the Company or any successor corporation, because of the incurring of the Indebtedness hereby authorized or under or by reason of any of the obligations, covenants, promises or agreements contained in this Indenture or in any of the Securities, or to be implied herefrom or therefrom, and that all liability, if any, of that character against every such incorporator, stockholder, officer and director is, by the acceptance of the Securities and as a condition of, and as part of the consideration for, the execution of this Indenture and the issue of the Securities, expressly waived and released.

ARTICLE XIV

SUPPLEMENTAL INDENTURES

Section 14.01. Section 14.01 Without Consent of Securityholders. Except as otherwise provided as contemplated by Section 3.01 with respect to any series of Securities, the Company and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any one or more of or all the following purposes:

(a) to add to the covenants and agreements of the Company, to be observed thereafter and during the period, if any, in such supplemental indenture or indentures expressed, and to add Events of Default, in each case for the protection or benefit of the Holders of all or any series of the Securities (and if such covenants, agreements and Events of Default are to be for the benefit of fewer than all series of Securities, stating that such covenants, agreements and Events of Default are expressly being included for the benefit of such series as shall be identified therein), or to surrender any right or power herein conferred upon the Company;

(b) to delete or modify any Events of Default with respect to all or any series of the Securities, the form and terms of which are being established pursuant to such supplemental indenture as permitted in Section 3.01 (and, if any such Event of Default is applicable to fewer than all such series of the Securities, specifying the series to which such Event of Default is applicable), and to specify the rights and remedies of the Trustee and the Holders of such Securities in connection therewith;

(c) to add to or change any of the provisions of this Indenture to provide, change or eliminate any restrictions on the payment of principal of or premium, if any, on Securities; provided that any such action shall not adversely affect the interests of the Holders of Securities of any series in any material respect;

(d) to change or eliminate any of the provisions of this Indenture; provided that any such change or elimination shall become effective only when there is no Outstanding Security of any series created prior to the execution of such supplemental indenture that is entitled to the benefit of such provision and as to which such supplemental indenture would apply;

(e) to evidence the succession of another corporation to the Company, or successive successions, and the assumption by such successor of the covenants and obligations of the Company contained in the Securities of one or more series and in this Indenture or any supplemental indenture;

(f) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to one or more series of Securities and to add to or change any of the provisions of this Indenture as shall be necessary for or facilitate the administration of the trusts hereunder by more than one Trustee, pursuant to the requirements of Section 11.06(c);

(g) to secure any series of Securities;

(h) to evidence any changes to this Indenture pursuant to Sections 11.05, 11.06 or 11.07 hereof as permitted by the terms thereof;

(i) to cure or reform any ambiguity mistake, manifest error, omission, defect or inconsistency, or to conform the text of any provision herein or in any indenture supplemental hereto to any description thereof in the applicable section of a prospectus, prospectus supplement or other offering document that was intended to be a verbatim recitation of a provision of this Indenture of any indenture supplemental hereto;

(j) to add to or change or eliminate any provision of this Indenture as shall be necessary or desirable in accordance with any amendments to the Trust Indenture Act;

(k) to add guarantors or co-obligors with respect to any series of Securities;

(l) to make any change in any series of Securities that does not adversely affect in any material respect the interests of the Holders of such Securities;

(m) to provide for uncertificated securities in addition to certificated securities;

(n) to supplement any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of Securities; provided that any such action shall not adversely affect the interests of the Holders of Securities of such series or any other series of Securities;

(o) to prohibit the authentication and delivery of additional series of Securities; or

(p) to establish the form and terms of Securities of any series as permitted in Section 3.01, or to authorize the issuance of additional Securities of a series previously authorized or to add to the conditions, limitations or restrictions on the authorized amount, terms or purposes of issue, authentication or delivery of the Securities of any series, as herein set forth, or other conditions, limitations or restrictions thereafter to be observed.

Subject to the provisions of Section 14.03, the Trustee is authorized to join with the Company in the execution of any such supplemental indenture, to make the further agreements and stipulations which may be therein contained and to accept the conveyance, transfer, assignment, mortgage or pledge of any property or assets thereunder.

Any supplemental indenture authorized by the provisions of this Section 14.01 may be executed by the Company and the Trustee without the consent of the Holders of any of the Securities at the time Outstanding, notwithstanding any of the provisions of Section 14.02.

Section 14.02. With Consent of Securityholders: Limitations.

(a) With the consent of the Holders (evidenced as provided in Article VIII) of at least a majority in aggregate principal amount of the Outstanding Securities of each series affected by such supplemental indenture voting separately, the Company and the Trustee may, from time to time and at any time, enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any provisions of this Indenture or of modifying in any manner the rights of the Holders of the Securities of such series to be affected; provided, however, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security of each such series affected thereby,

(i) extend the Stated Maturity of the principal of, or any installment of interest on, any Security, or reduce the principal amount thereof or the interest thereon or any premium payable upon redemption thereof, or extend the Stated Maturity of, or change the Currency in which the principal of and premium, if any, or interest on such Security is denominated or payable, or reduce the amount of the principal of an Original Issue Discount Security that would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 7.02, or impair the right to institute suit for the enforcement of any payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the Redemption Date), or materially adversely affect the economic terms of any right to convert or exchange any Security as may be provided pursuant to Section 3.01; or

(ii) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any supplemental indenture, or the consent of whose Holders is required for any waiver of compliance with certain provisions of this Indenture or certain Defaults hereunder and their consequences provided for in this Indenture; or

(iii) modify any of the provisions of this Section, Section 6.06 or Section 7.06, except to increase any such percentage or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby; provided, however, that this clause shall not be deemed to require the consent of

any Holder with respect to changes in the references to “the *Trustee*” and concomitant changes in this Section and Section 6.06, or the deletion of this proviso, in accordance with the requirements of Sections 11.06 and 14.01(f); or

(iv) modify, without the written consent of the Trustee, the rights, duties or immunities of the Trustee.

(b) A supplemental indenture that changes or eliminates any provision of this Indenture which has expressly been included solely for the benefit of one or more particular series of Securities or which modifies the rights of the Holders of Securities of such series with respect to such covenant or other provision, shall be deemed not to affect the rights under this Indenture of the Holders of Securities of any other series.

(c) It shall not be necessary for the consent of the Securityholders under this Section 14.02 to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such consent shall approve the substance thereof.

(d) The Company may set a record date for purposes of determining the identity of the Holders of each series of Securities entitled to give a written consent or waive compliance by the Company as authorized or permitted by this Section. Such record date shall not be more than 30 days prior to the first solicitation of such consent or waiver or the date of the most recent list of Holders furnished to the Trustee prior to such solicitation pursuant to Section 312 of the Trust Indenture Act.

(e) Promptly after the execution by the Company and the Trustee of any supplemental indenture pursuant to the provisions of this Section 14.02, the Company shall mail a notice, setting forth in general terms the substance of such supplemental indenture, to the Holders of Securities at their addresses as the same shall then appear in the Register of the Company. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture.

Section 14.03. Trustee Protected. Upon the request of the Company, accompanied by the Officer’s Certificate and Opinion of Counsel required by Section 16.01 stating that the execution of such supplemental indenture is authorized or permitted by this Indenture, and evidence reasonably satisfactory to the Trustee of consent of the Holders if the supplemental indenture is to be executed pursuant to Section 14.02, the Trustee shall join with the Company in the execution of said supplemental indenture unless said supplemental indenture affects the Trustee’s own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into said supplemental indenture. The Trustee shall be fully protected in relying upon such Officer’s Certificate and an Opinion of Counsel.

Section 14.04. Effect of Execution of Supplemental Indenture. Upon the execution of any supplemental indenture pursuant to the provisions of this Article XIV, this Indenture shall be deemed to be modified and amended in accordance therewith and, except as herein otherwise expressly provided, the respective rights, limitations of rights, obligations, duties and immunities under this Indenture of the Trustee, the Company and the Holders of all of the Securities or of the Securities of any series affected, as the case may be, shall thereafter be determined, exercised and enforced hereunder subject in all respects to such modifications and amendments, and all the terms and conditions of any such supplemental indenture shall be and be deemed to be part of the terms and conditions of this Indenture for any and all purposes.

Section 14.05. Notation on or Exchange of Securities Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to the provisions of this Article may bear a notation in the form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company or the Trustee shall so determine, new Securities so modified as to conform, in the opinion of the Trustee and the Board of Directors of the Company, to any modification of this Indenture contained in any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for the Securities then Outstanding in equal aggregate principal amounts, and such exchange shall be made without cost to the Holders of the Securities.

Section 14.06. Conformity with TIA. Every supplemental indenture executed pursuant to the provisions of this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

ARTICLE XV

SUBORDINATION OF SECURITIES

Section 15.01. Agreement to Subordinate. In the event a series of Securities is designated as subordinated pursuant to Section 3.01, and except as otherwise provided in a Company Order or in one or more indentures supplemental hereto, the Company, for itself, its successors and assigns, covenants and agrees, and each Holder of Securities of such series by his, her or its acceptance thereof, likewise covenants and agrees, that the payment of the principal of (and premium, if any) and interest, if any, on each and all of the Securities of such series is hereby expressly subordinated, to the extent and in the manner hereinafter set forth, in right of payment to the prior payment in full of all Senior Indebtedness. In the event a series of Securities is not designated as subordinated pursuant to Section 3.01(s), this Article XV shall have no effect upon the Securities.

Section 15.02. Distribution on Dissolution, Liquidation and Reorganization; Subrogation of Securities. Subject to Section 15.01, upon any distribution of assets of the Company upon any dissolution, winding up, liquidation or reorganization of the Company, whether in bankruptcy, insolvency, reorganization or receivership proceedings or upon an assignment for the benefit of creditors or any other marshalling of the assets and liabilities of the Company or otherwise (subject to the power of a court of competent jurisdiction to make other equitable provision reflecting the rights conferred in this Indenture upon the Senior Indebtedness and the holders thereof with respect to the Securities and the holders thereof by a lawful plan of reorganization under applicable bankruptcy law):

(a) the holders of all Senior Indebtedness shall be entitled to receive payment in full of the principal thereof (and premium, if any) and interest due thereon before the Holders of the Securities are entitled to receive any payment upon the principal (or premium, if any) or interest, if any, on Indebtedness evidenced by the Securities; and

(b) any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities, to which the Holders of the Securities or the Trustee would be entitled except for the provisions of this Article XV shall be paid by the liquidation trustee or agent or other Person making such payment or distribution, whether a trustee in bankruptcy, a receiver or liquidating trustee or otherwise, directly to the holders of Senior Indebtedness or their representative or representatives or to the trustee or trustees under any indenture under which any instruments evidencing any of such Senior Indebtedness may have been issued, ratably according to the aggregate amounts remaining unpaid on account of the principal of (and premium, if any) and interest on the Senior Indebtedness held or represented by each, to the extent necessary to make payment in full of all Senior Indebtedness remaining unpaid, after giving effect to any concurrent payment or distribution to the holders of such Senior Indebtedness; and

(c) in the event that, notwithstanding the foregoing, any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities prohibited by the foregoing, shall be received by the Trustee or the Holders of the Securities before all Senior Indebtedness is paid in full, such payment or distribution shall be paid over, upon written notice to a Responsible Officer of the Trustee, to the holder of such Senior Indebtedness or his, her or its representative or representatives or to the trustee or trustees under any indenture under which any instrument evidencing any of such Senior Indebtedness may have been issued, ratably as aforesaid, as calculated by the Company, for application to payment of all Senior Indebtedness remaining unpaid until all such Senior Indebtedness shall have been paid in full, after giving effect to any concurrent payment or distribution to the holders of such Senior Indebtedness.

(d) Subject to the payment in full of all Senior Indebtedness, the Holders of the Securities shall be subrogated to the rights of the holders of Senior Indebtedness (to the extent that distributions otherwise payable to such holder have been applied to the payment of Senior Indebtedness) to receive payments or distributions of cash, property or securities of the Company applicable to Senior Indebtedness until the principal of (and premium, if any) and interest, if any, on the Securities shall be paid in full and no such payments or distributions to the Holders of the Securities of cash, property or securities otherwise distributable to the holders of

Senior Indebtedness shall, as between the Company, its creditors other than the holders of Senior Indebtedness, and the Holders of the Securities be deemed to be a payment by the Company to or on account of the Securities. It is understood that the provisions of this Article XV are and are intended solely for the purpose of defining the relative rights of the Holders of the Securities, on the one hand, and the holders of the Senior Indebtedness, on the other hand. Nothing contained in this Article XV or elsewhere in this Indenture or in the Securities is intended to or shall impair, as between the Company, its creditors other than the holders of Senior Indebtedness, and the Holders of the Securities, the obligation of the Company, which is unconditional and absolute, to pay to the Holders of the Securities the principal of (and premium, if any) and interest, if any, on the Securities as and when the same shall become due and payable in accordance with their terms, or to affect the relative rights of the Holders of the Securities and creditors of the Company other than the holders of Senior Indebtedness, nor shall anything herein or in the Securities prevent the Trustee or the Holder of any Security from exercising all remedies otherwise permitted by applicable law upon default under this Indenture, subject to the rights, if any, under this Article XV of the holders of Senior Indebtedness in respect of cash, property or securities of the Company received upon the exercise of any such remedy. Upon any payment or distribution of assets of the Company referred to in this Article XV, the Trustee, subject to the provisions of Section 15.05, shall be entitled to conclusively rely upon a certificate of the liquidating trustee or agent or other person making any distribution to the Trustee for the purpose of ascertaining the Persons entitled to participate in such distribution, the holders of Senior Indebtedness and other indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereof and all other facts pertinent thereto or to this Article XV.

Section 15.03. No Payment on Securities in Event of Default on Senior Indebtedness Subject to Section 15.01, no payment by the Company on account of principal (or premium, if any), sinking funds or interest, if any, on the Securities shall be made at anytime if: (i) a default on Senior Indebtedness exists that permits the holders of such Senior Indebtedness to accelerate its maturity and (ii) the default is the subject of judicial proceedings or the Company has received notice of such default. The Company may resume payments on the Securities when full payment of amounts then due for principal (premium, if any), sinking funds and interest on Senior Indebtedness has been made or duly provided for in money or money's worth.

In the event that, notwithstanding the foregoing, any payment shall be received by the Trustee when such payment is prohibited by the preceding paragraph of this Section 15.03, such payment shall be held in trust for the benefit of, and shall be paid over or delivered to, the holders of such Senior Indebtedness or their respective representatives, or to the trustee or trustees under any indenture pursuant to which any of such Senior Indebtedness may have been issued, as their respective interests may appear, as calculated by the Company, but only to the extent that the holders of such Senior Indebtedness (or their representative or representatives or a trustee) notify the Trustee in writing within 90 days of such payment of the amounts then due and owing on such Senior Indebtedness and only the amounts specified in such notice to the Trustee shall be paid to the holders of such Senior Indebtedness.

Section 15.04. Payments on Securities Permitted. Subject to Section 15.01, nothing contained in this Indenture or in any of the Securities shall (a) affect the obligation of the Company to make, or prevent the Company from making, at any time except as provided in Sections 15.02 and 15.03, payments of principal of (or premium, if any) or interest, if any, on the Securities or (b) prevent the application by the Trustee of any moneys or assets deposited with it hereunder to the payment of or on account of the principal of (or premium, if any) or interest, if any, on the Securities, unless a Responsible Officer of the Trustee shall have received at its Corporate Trust Office written notice of any fact prohibiting the making of such payment from the Company or from the holder of any Senior Indebtedness or from the trustee for any such holder, together with proof satisfactory to the Trustee of such holding of Senior Indebtedness or of the authority of such trustee more than two Business Days prior to the date fixed for such payment.

Section 15.05. Authorization of Securityholders to Trustee to Effect Subordination. Subject to Section 15.01, each Holder of Securities by his acceptance thereof authorizes and directs the Trustee on his, her or its behalf to take such action as may be necessary or appropriate to effectuate the subordination as provided in this Article XV and appoints the Trustee his attorney-in-fact for any and all such purposes.

Section 15.06. Notices to Trustee. The Company shall give prompt written notice to a Responsible Officer of the Trustee of any fact known to the Company that would prohibit the making of any payment of monies or assets to or by the Trustee in respect of the Securities of any series pursuant to the provisions of this Article XV.

Subject to Section 15.01, notwithstanding the provisions of this Article XV or any other provisions of this Indenture, neither the Trustee nor any Paying Agent (other than the Company) shall be charged with knowledge of the existence of any Senior Indebtedness or of any fact which would prohibit the making of any payment of moneys or assets to or by the Trustee or such Paying Agent, unless and until a Responsible Officer of the Trustee or such Paying Agent shall have received (in the case of a Responsible Officer of the Trustee, at the Corporate Trust Office of the Trustee) written notice thereof from the Company or from the holder of any Senior Indebtedness from the trustee for any such holder, together with proof satisfactory to the Trustee of such holding of Senior Indebtedness or of the authority of such trustee and, prior to the receipt of any such written notice, the Trustee shall be entitled in all respects conclusively to presume that no such facts exist; provided, however, that if at least two Business Days prior to the date upon which by the terms hereof any such moneys or assets may become payable for any purpose (including, without limitation, the payment of either the principal (or premium, if any) or interest, if any, on any Security) a Responsible Officer of the Trustee shall not have received with respect to such moneys or assets the notice provided for in this Section 15.06, then, anything herein contained to the contrary notwithstanding, the Trustee shall have full power and authority to receive such moneys or assets and to apply the same to the purpose for which they were received, and shall not be affected by any notice to the contrary which may be received by it within two Business Days prior to such date. The Trustee shall be entitled to rely on the delivery to it of a written notice by a Person representing himself to be a holder of Senior Indebtedness (or a trustee on behalf of such holder) to establish that such a notice has been given by a holder of Senior Indebtedness or a trustee on behalf of any such holder. In the event that the Trustee determines in good faith that further evidence is required with respect to the right of any Person as a holder of Senior Indebtedness to participate in any payment or distribution pursuant to this Article XV, the Trustee may request such Person to furnish evidence to the reasonable satisfaction of the Trustee as to the amount of Senior Indebtedness held by such Person, the extent to which such Person is entitled to participate in such payment or distribution and any other facts pertinent to the rights of such Person under this Article XV and, if such evidence is not furnished, the Trustee may defer any payment to such Person pending judicial determination as to the right of such Person to receive such payment.

Section 15.07. Trustee as Holder of Senior Indebtedness. Subject to Section 15.01, the Trustee in its individual capacity shall be entitled to all the rights set forth in this Article XV in respect of any Senior Indebtedness at any time held by it to the same extent as any other holder of Senior Indebtedness and nothing in this Indenture shall be construed to deprive the Trustee of any of its rights as such holder. Nothing in this Article XV shall apply to claims of, or payments to, the Trustee under or pursuant to Sections 7.05 or 11.01.

Section 15.08. Modifications of Terms of Senior Indebtedness. Subject to Section 15.01, any renewal or extension of the time of payment of any Senior Indebtedness or the exercise by the holders of Senior Indebtedness of any of their rights under any instrument creating or evidencing Senior Indebtedness, including, without limitation, the waiver of default thereunder, may be made or done all without notice to or assent from the Holders of the Securities or the Trustee. No compromise, alteration, amendment, modification, extension, renewal or other change of, or waiver, consent or other action in respect of, any liability or obligation under or in respect of, or of any of the terms, covenants or conditions of any indenture or other instrument under which any Senior Indebtedness is outstanding or of such Senior Indebtedness, whether or not such release is in accordance with the provisions of any applicable document, shall in any way alter or affect any of the provisions of this Article XV or of the Securities relating to the subordination thereof.

Section 15.09. Reliance on Judicial Order or Certificate of Liquidating Agent. Subject to Section 15.01, upon any payment or distribution of assets of the Company referred to in this Article XV, the Trustee and the Holders of the Securities shall be entitled to conclusively rely upon any order or decree entered by any court of competent jurisdiction in which such insolvency, bankruptcy, receivership, liquidation, reorganization, dissolution, winding up or similar case or proceeding is pending, or a certificate of the trustee in bankruptcy, liquidating trustee, custodian, receiver, assignee for the benefit of creditors, agent or other person making such payment or distribution, delivered to the Trustee or to the Holders of Securities, for the purpose of ascertaining the Persons entitled to participate in such payment or distribution, the holders of Senior Indebtedness and other indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article XV.

Section 15.10. Satisfaction and Discharge; Defeasance and Covenant Defeasance. Subject to Section 15.01, amounts and U.S. Government Obligations deposited in trust with the Trustee pursuant to and in accordance

with Article XII and not, at the time of such deposit, prohibited to be deposited under Sections 15.02 or 15.03 shall not be subject to this Article XV.

Section 15.11. Section 15.11 Trustee Not Fiduciary for Holders of Senior Indebtedness With respect to the holders of Senior Indebtedness, the Trustee undertakes to perform or observe only such of its covenants and obligations as are specifically set forth in this Article XV, and no implied covenants or obligations with respect to the holders of Senior Indebtedness shall be read into this Indenture against the Trustee. The Trustee shall not be deemed to owe any fiduciary duty to the holders of Senior Indebtedness. The Trustee shall not be liable to any such holder if it shall pay over or distribute to or on behalf of Holders of Securities or the Company, or any other Person, moneys or assets to which any holder of Senior Indebtedness shall be entitled by virtue of this Article XV or otherwise.

ARTICLE XVI

MISCELLANEOUS PROVISIONS

Section 16.01. Section 16.01 Certificates and Opinions as to Conditions Precedent

(a) Upon any request or application by the Company to the Trustee to take any action under any of the provisions of this Indenture, the Company shall furnish to the Trustee an Officer's Certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent have been complied with, except that in the case of any such application or demand as to which the furnishing of such document is specifically required by any provision of this Indenture relating to such particular application or demand, no additional certificate or opinion need be furnished.

(b) Each certificate or opinion provided for in this Indenture and delivered to the Trustee with respect to compliance with a condition or covenant provided for in this Indenture (other than the certificates provided pursuant to Section 6.05 of this Indenture) shall include (i) a statement that the Person giving such certificate or opinion has read such covenant or condition; (ii) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based; (iii) a statement that, in the view or opinion of such Person, he or she has made such examination or investigation as is necessary to enable such Person to express an informed view or opinion as to whether or not such covenant or condition has been complied with; and (iv) a statement as to whether or not, in the view or opinion of such Person, such condition or covenant has been complied with.

(c) Any certificate, statement or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon a certificate or opinion of, or representations by, counsel, unless such officer knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which his or her certificate, statement or opinion is based are erroneous. Any certificate, statement or opinion of counsel may be based, insofar as it relates to factual matters, upon a certificate, statement or opinion of, or representations by, an officer or officers of the Company stating that the information with respect to such factual matters is in the possession of the Company, unless such counsel knows, or in the exercise of reasonable care should know, that the certificate, statement or opinion or representations with respect to such matters are erroneous.

(d) Any certificate, statement or opinion of an officer of the Company or of counsel to the Company may be based, insofar as it relates to accounting matters, upon a certificate or opinion of, or representations by, an accountant or firm of accountants, unless such officer or counsel, as the case may be, knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the accounting matters upon which his or her certificate, statement or opinion may be based are erroneous. Any certificate or opinion of any firm of independent registered public accountants filed with the Trustee shall contain a statement that such firm is independent.

(e) In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion

of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

(f) Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

Section 16.02. Trust Indenture Act Controls. If and to the extent that any provision of this Indenture limits, qualifies or conflicts with the duties imposed by, or another provision included in this Indenture which is required to be included in this Indenture by any of the provisions of Sections 310 to 318, inclusive, of the Trust Indenture Act, such imposed duties or incorporated provision shall control.

Section 16.03. Notices to the Company and Trustee. Any notice or demand authorized by this Indenture to be made upon, given or furnished to, or filed with, the Company or the Trustee shall be sufficiently made, given, furnished or filed for all purposes if it shall be mailed, delivered or telefaxed to:

(a) the Company, at 700 Pennsylvania Drive, Exton PA 19341, Attention: Chief Executive Officer, Facsimile No.: (484) 595-1582, or at such other address or facsimile number as may have been furnished in writing to the Trustee by the Company.

(b) the Trustee, at the Corporate Trust Office of the Trustee, Attention: Trust Administrator.

Any such notice, demand or other document shall be in the English language.

Section 16.04. Notices to Securityholders; Waiver. Any notice required or permitted to be given to Securityholders shall be sufficiently given (unless otherwise herein expressly provided),

(a) if to Holders, if given in writing by first class mail, postage prepaid, to such Holders at their addresses as the same shall appear on the Register of the Company.

(b) In the event of suspension of regular mail service or by reason of any other cause it shall be impracticable to give notice by mail, then such notification as shall be given with the approval of the Trustee shall constitute sufficient notice for every purpose hereunder.

(c) Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance on such waiver. In any case where notice to Holders is given by mail; neither the failure to mail such notice nor any defect in any notice so mailed to any particular Holder shall affect the sufficiency of such notice with respect to other Holders, and any notice that is mailed in the manner herein provided shall be conclusively presumed to have been duly given. In any case where notice to Holders is given by publication, any defect in any notice so published as to any particular Holder shall not affect the sufficiency of such notice with respect to other Holders, and any notice that is published in the manner herein provided shall be conclusively presumed to have been duly given.

Section 16.05. Legal Holiday. Unless otherwise specified pursuant to Section 3.01, in any case where any Interest Payment Date, Redemption Date or Maturity of any Security of any series shall not be a Business Day at any Place of Payment for the Securities of that series, then payment of principal and premium, if any, or interest need not be made at such Place of Payment on such date, but may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on such Interest Payment Date, Redemption Date or Maturity and no interest shall accrue on such payment for the period from and after such Interest Payment Date, Redemption Date or Maturity, as the case may be, to such Business Day if such payment is made or duly provided for on such Business Day.

Section 16.06. Effects of Headings and Table of Contents. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

Section 16.07. Successors and Assigns. All covenants and agreements in this Indenture by the parties hereto shall bind their respective successors and assigns and inure to the benefit of their permitted successors and assigns, whether so expressed or not.

Section 16.08. Separability Clause. In case any provision in this Indenture or in the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 16.09. Benefits of Indenture. Nothing in this Indenture expressed and nothing that may be implied from any of the provisions hereof is intended, or shall be construed, to confer upon, or to give to, any Person or corporation other than the parties hereto and their successors and the Holders of the Securities any benefit or any right, remedy or claim under or by reason of this Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all covenants, conditions, stipulations, promises and agreements in this Indenture contained shall be for the sole and exclusive benefit of the parties hereto and their successors and of the Holders of the Securities.

Section 16.10. Counterparts Originals. This Indenture may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

Section 16.11. Governing Law; Waiver of Trial by Jury. This Indenture and the Securities shall be deemed to be contracts made under the law of the State of New York and for all purposes shall be governed by and construed in accordance with the law of said State.

EACH PARTY HERETO, AND EACH HOLDER OF A SECURITY BY ACCEPTANCE THEREOF, HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS INDENTURE.

[signature page follows]

IN WITNESS WHEREOF, the parties have caused this Indenture to be duly executed as of the date first written above.

ENZO BIOCHEM, INC.,
as Issuer

By: _____

Name:
Title:

as Trustee

By: _____

Name:
Title:



CROSS-REFERENCE TABLE (1)

Section of Trust Indenture Act of 1939, as Amended Section of Indenture

310(a)	11.04(a)
310(b)	11.04(b)
310(c)	Inapplicable
311(a)	11.01(f)
311(b)	11.01(f)
311(c)	Inapplicable
312(a)	10.03
312(b)	11.10
312(c)	11.10
313(a)	10.01(a)
313(b)	10.01(a)
313(c)	10.01(a)
313(d)	10.01(b)
314(a)	6.05
	10.02
314(b)	Inapplicable
314(c)	16.01(a)
	16.01(d)
314(d)	Inapplicable
314(e)	16.01(b)
314(f)	Inapplicable
315(a)	11.02(b)
315(b)	11.03
315(c)	11.02(a)
315(d)	11.02(b)(i)
	11.02(b)(ii)
315(e)	7.08
316(a)	7.06
316(b)	7.07
316(c)	8.02(e)
317(a)	7.03
317(b)	6.03
318(a)	16.02

(1) This Cross-Reference Table does not constitute part of the Indenture and shall not have any bearing on the interpretation of any of its terms or provisions.

OPINION OF MCDERMOTT WILL & EMERY LLP

[Letterhead of McDermott Will & Emery LLP]

August 1, 2013

Enzo Biochem, Inc.
527 Madison Avenue
New York, NY 10022

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Enzo Biochem, Inc., a New York corporation (the "Company"), in connection with the Registration Statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Act"), relating to the proposed public offering on a delayed basis pursuant to Rule 415 under the Act by the Company of up to a total of \$50,000,000 of securities consisting of (i) shares of the Company's common stock, par value \$.01 per share ("Common Stock"), (ii) secured or unsecured debt securities, in one or more series, which may be either senior debt securities or subordinated debt securities ("Debt Securities"), to be issued pursuant to an indenture between the Company and a trustee or bank to be named, which may be supplemented for any series of Debt Securities and which is filed as an exhibit to the Registration Statement (the "Indenture"), (iii) shares of the Company's preferred stock, par value \$.01 per share ("Preferred Stock"), (iv) warrants to purchase Common Stock, Preferred Stock or Debt Securities, (v) depository shares and (vi) units composed of the foregoing ("Units") (collectively, the "Securities"). The Securities may be sold by the Company from time to time as set forth in the Registration Statement, the prospectus that forms a part of the Registration Statement (the "Prospectus") and as will be set forth in one or more supplements to the Prospectus (each, a "Prospectus Supplement").

We have also acted as counsel to the Company in connection with the sale from time to time by the Company, pursuant to the Sales Agreement, dated March 28, 2013, between the Company and Cantor Fitzgerald & Co., of shares of Common Stock having an aggregate offering price of up to \$18,000,000 that are available for issuance as of July 19, 2013 (the "ATM Shares"). Sales of the ATM Shares will be made pursuant to the Registration Statement and the related prospectus covering the ATM Shares included in the Registration Statement.

In arriving at the opinion expressed below, we have assumed that (i) the issuance, sale, amount and terms of the Securities to be offered from time to time will be duly authorized and determined by proper action of the Board of Directors of the Company (the "Board") consistent with the procedures and terms described in the Registration Statement and the applicable Prospectus Supplement (each, a "Board Action") and in accordance with the Company's Certificate of Incorporation, as amended (the "Certificate"), the Company's By-laws, as amended, the Indenture and applicable New York law, (ii) the Registration Statement and any amendments thereto (including post-effective amendments) are effective under the Act, (iii) a Prospectus Supplement will have been filed with the SEC describing the Securities offered thereby, (iv) all Securities will

be issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the applicable Prospectus Supplement and (v) any underwriting or purchase agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by each of the parties thereto (other than the Company).

We have also assumed that the laws of the State of New York will be chosen to govern the Indenture, any warrant agreements and any deposit agreement, and that such choice is a valid and legal provision. In addition, we have examined and relied, to the extent we deemed proper, on certificates of officers of the Company as to factual matters, and on originals or copies certified or otherwise identified to our satisfaction, of all such corporate records of the Company and such other instruments and certificates of public officials and other persons as we have deemed appropriate. In our examination, we have assumed the authenticity of all documents submitted to us as originals, the conformity to the original documents of all documents submitted to us as copies, the genuineness of all signatures on documents reviewed by us and the legal capacity of natural persons.

Based upon, subject to and limited by the foregoing, we are of the opinion that, as of the date hereof:

1. Upon due authorization by Board Action of an issuance of Common Stock (other than the ATM Shares as to which our opinion is expressed in paragraph 7 below), and upon issuance and delivery of the Common Stock against payment of valid consideration therefor in accordance with the terms of such Board Action and any applicable underwriting or purchase agreement, and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, the shares of Common Stock will be validly issued, fully paid and non-assessable.

2. When the Indenture has been duly executed on behalf of the Company and the trustee thereunder (the "Trustee"), the Trustee has been qualified to act as trustee under the Indenture and when the Debt Securities have been (i) duly established by the Indenture or any supplemental indenture thereto, (ii) duly authorized and established by applicable Board Action and duly authenticated by the Trustee and (iii) duly executed and delivered on behalf of the Company against payment therefor in accordance with the terms of such Board Action, any applicable underwriting or purchase agreement, the Indenture and any applicable supplemental indenture thereto, and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, the Debt Securities will constitute valid and binding obligations of the Company, enforceable in accordance with their terms, except that the enforceability thereof may be limited by or subject to bankruptcy, reorganization, insolvency, fraudulent conveyance, moratorium or other similar laws now or hereafter existing which affect the rights and remedies of creditors generally and equitable principles of general applicability.

3. When the Preferred Stock has been duly authorized and established by applicable Board Action, in accordance with the terms of the Certificate and applicable law, upon issuance and delivery of the Preferred Stock against payment of valid consideration therefor in accordance with the terms of such Board Action and any applicable underwriting or purchase agreement, and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, such shares of Preferred Stock will be validly issued, fully paid and non-assessable.

4. When the warrants to purchase Common Stock, Preferred Stock or Debt Securities have been (i) duly authorized and established by applicable Board Action, and (ii) duly executed and delivered on behalf of the Company against payment therefor in accordance with the terms of such Board Action, any applicable underwriting or purchase agreement, and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, the warrants to purchase Common Stock, Preferred Stock or Debt Securities will constitute binding obligations of the Company, enforceable in accordance with their terms, except that the enforceability thereof may be limited by or subject to bankruptcy, reorganization, insolvency, fraudulent conveyance, moratorium or other similar laws now or hereafter existing which affect the rights and remedies of creditors generally and equitable principles of general applicability.

5. When the depositary shares, the underlying Preferred Stock and a deposit agreement in connection therewith have been duly authorized and established by applicable Board Action, in accordance with the terms of the Certificate and applicable law, and when (i) a deposit agreement substantially as described in the Registration Statement has been duly executed and delivered by the Company and a depositary, and (ii) the depositary receipts representing the depositary shares in the form contemplated and authorized by such deposit agreement have been duly executed and delivered by such depositary and delivered to and paid for by the purchasers thereof in the manner contemplated by the Registration Statement and/or the applicable Prospectus Supplement, upon issuance and delivery of the Preferred Stock against payment of valid consideration therefor in accordance with the terms of such Board Action and any applicable underwriting or purchase agreement, and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, such depositary shares will be validly issued and will entitle the holders thereof to the rights specified in the depositary receipts and the deposit agreement relating to such depositary shares.

6. With respect to the Units, when (i) the Board has taken the appropriate Board Action to approve and establish the terms of the Units and to authorize and approve the issuance thereof, the terms of the offering and related matters, and (ii) the Units have been duly executed and delivered in accordance with the applicable underwriting or purchase agreement approved by or on behalf of the Board, upon payment of the consideration therefor provided therein and as contemplated by the Registration Statement and/or the applicable Prospectus Supplement, the Units will constitute binding obligations of the Company, enforceable against the Company in accordance with their terms, except that the enforceability thereof may be limited by or subject to bankruptcy, reorganization, insolvency, fraudulent conveyance, moratorium or other similar laws now or hereafter existing which affect the rights and remedies of creditors generally and equitable principles of general applicability.

7. With respect to the ATM Shares, all corporate proceedings necessary for the authorization, issuance and delivery of the ATM Shares have been taken and, upon issuance pursuant to the terms of the Sales Agreement and in accordance with the board resolutions related to the offering of the ATM Shares, the ATM Shares will be validly issued, fully paid and non-assessable by the Company.

To the extent that the obligations of the Company under a deposit agreement or the obligations of the Company under the Indenture may be dependent upon such matters, we have assumed for purposes of this opinion (i) that the applicable depositary or trustee, as the case may be, is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization

and is duly qualified to engage in the activities contemplated by the applicable deposit agreement or the Indenture, as the case may be, (ii) that such deposit agreement or Indenture, as the case may be, has been duly authorized, executed and delivered by and constitutes the legal, valid and binding obligation of such depository or trustee, as the case may be, enforceable against the depository or the trustee, as the case may be, in accordance with its respective terms, except that the enforceability thereof may be limited by or subject to bankruptcy, reorganization, insolvency, fraudulent conveyance, moratorium or other similar laws now or hereafter existing which affect the rights and remedies of creditors generally and equitable principles of general applicability, (iii) that such depository or trustee, as the case may be, is in compliance, generally and with respect to acting as a depository or trustee, respectively, under the applicable deposit agreement or the Indenture, with all applicable laws and regulations, and (iv) that such depository or trustee, as the case may be, has the requisite organizational and legal power and authority to perform its obligations under the applicable deposit agreement or the Indenture, as the case may be.

We express no opinion as to the applicability of, compliance with or effect of, the law of any jurisdiction other than the laws of the State of New York.

This opinion speaks only as of the date hereof. We expressly disclaim any responsibility to advise you of any development or circumstance of any kind, including any change of law or fact, that may occur after the date of this opinion that might affect the opinions expressed therein.

We hereby consent to the reference to our firm under the caption "Legal Matters" in the Registration Statement and to the use of this opinion as an exhibit to the Registration Statement. In giving this consent, we do not hereby admit that we come within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the SEC thereunder.

Very respectfully yours,

/s/ MCDERMOTT WILL & EMERY LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Enzo Biochem, Inc. for the registration of up to \$50 million of its common stock, preferred stock, depositary shares, debt securities, warrants and units and to the incorporation by reference therein of our reports dated October 15, 2012, with respect to the consolidated financial statements and schedule of Enzo Biochem, Inc., and the effectiveness of internal control over financial reporting of Enzo Biochem, Inc., included in its Annual Report (Form 10-K) for the year ended July 31, 2012, filed with the Securities and Exchange Commission.

/s/Ernst & Young LLP

Jericho, New York
August 1, 2013
