



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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company   
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

#### CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities to be Registered | Amount to be Registered(1) | Proposed Maximum Aggregate Offering Price(1) | Amount of Registration Fee(2) |
|--|----------------------------|--|-------------------------------|
| <b>Primary Offering of Securities:</b>             |                            |  |                               |
| Common Stock, \$0.001 par value per share          | —                          | —  | —                             |
| Preferred Stock, \$0.001 par value per share       | —                          | —  | —                             |
| Debt Securities                                    | —                          | —  | —                             |
| Warrants   | —                          | —  | —                             |
| Units  | —                          | —  | —                             |
| Subtotal   | —                          | —  | —                             |
| <b>Secondary Offering of Common Stock:</b>         |                            |  |                               |
| Common Stock, \$0.001 par value per share          | —                          | —  | —                             |
| <b>Primary Offering of Common Stock:</b>           |                            |  |                               |
| Common Stock, \$0.001 par value per share          | \$100,000,000              | \$100,000,000                                | \$12,120(3)                   |
| Total:   | \$100,000,000              | \$100,000,000                                | \$12,120                      |

- (1) Omitted pursuant to Form S-3 General Instruction II.E. An unspecified number of the securities of each identified class is being registered for possible issuance from time to time at indeterminate prices. The securities being registered hereunder includes an indeterminate number of securities that may be issued in primary offerings, secondary offerings or upon exercise, conversion or exchange of any securities registered hereunder that provide for exercise, conversion or exchange. Separate consideration may or may not be received for securities that are issuable upon the conversion or exercise of, or in exchange for, other securities offered hereby or that are offered in combination.
- (2) In accordance with Rules 456(b) and 457(r), the Registrant is deferring payment of all registration fees, other than with respect to the primary offering of common stock being registered concurrently. Any registration fees will be paid subsequently on a pay-as-you-go basis in accordance with Rule 457(r).
- (3) Calculated pursuant to Rule 457(o) and Rule 457(r) under the Securities Act.

## EXPLANATORY NOTE

This registration statement contains:

- § a base prospectus which covers the offering, issuance and sale by us or selling stockholders of the securities identified above from time to time in one or more offerings; and
- § a sales agreement prospectus covering the offering, issuance and sale by us of up to a maximum aggregate offering price of \$100,000,000 of our common stock that may be issued and sold from time to time under a sales agreement with Cowen and Company, LLC.

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 specific terms of the securities to be issued and sold under the sales agreement are specified in the sales agreement prospectus that immediately follows the base prospectus.

---



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

From time to time, we may offer and sell any combination of the securities described in this prospectus, either individually or in combination, at prices and on terms described in one or more supplements to this prospectus. Selling stockholders to be named in a supplement to this prospectus may also from time to time offer and sell shares of our common stock, in one or more offerings.

We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable antidilution provisions. We or any selling stockholder may sell the securities to or through underwriters and also to other purchasers or through agents, on a continuous or delayed basis. The names of any underwriters or agents, and any fees, conversions, or discount arrangements will be set forth in the applicable prospectus supplement accompanying this prospectus. The price to the public of such securities and the net proceeds that we or the selling stockholders expect to receive from such sale will also be set forth in a prospectus supplement. Unless the applicable prospectus supplement provides otherwise, we will not receive any proceeds from the sale of securities by selling stockholders.

This prospectus provides a general description of the securities we may offer. We will provide the specific terms of these offerings in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered. **This prospectus may not be used to consummate a sale of securities unless it is accompanied by the applicable prospectus supplement.**

Our common stock is listed on the Nasdaq Global Market under the symbol "RYTM." On November 8, 2018, the closing price for our common stock, as reported on the Nasdaq Global Market, was \$31.34 per share.

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements.

***Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in this prospectus beginning on page 4 and any applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the other documents that are 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 November 9, 2018.

---

**TABLE OF CONTENTS**

|   | <b>Page</b>        |
|---|--------------------|
| <a href="#">ABOUT THIS PROSPECTUS</a>                                     | <a href="#">ii</a> |
| <a href="#">PROSPECTUS SUMMARY</a>  | <a href="#">1</a>  |
| <a href="#">RISK FACTORS</a>  | <a href="#">4</a>  |
| <a href="#">CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</a> | <a href="#">4</a>  |
| <a href="#">USE OF PROCEEDS</a>   | <a href="#">6</a>  |
| <a href="#">THE SECURITIES WE MAY OFFER</a>                               | <a href="#">6</a>  |
| <a href="#">DESCRIPTION OF CAPITAL STOCK</a>                              | <a href="#">7</a>  |
| <a href="#">DESCRIPTION OF DEBT SECURITIES</a>                            | <a href="#">13</a> |
| <a href="#">DESCRIPTION OF WARRANTS</a>                                   | <a href="#">22</a> |
| <a href="#">DESCRIPTION OF UNITS</a>                                      | <a href="#">24</a> |
| <a href="#">SELLING STOCKHOLDERS</a>                                      | <a href="#">24</a> |
| <a href="#">PLAN OF DISTRIBUTION</a>                                      | <a href="#">25</a> |
| <a href="#">LEGAL MATTERS</a>   | <a href="#">29</a> |
| <a href="#">EXPERTS</a>   | <a href="#">29</a> |
| <a href="#">WHERE YOU CAN FIND MORE INFORMATION</a>                       | <a href="#">29</a> |
| <a href="#">INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</a>         | <a href="#">30</a> |

## ABOUT THIS PROSPECTUS

This prospectus is part of an automatic registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration process as a "well-known seasoned issuer" as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. Under this shelf registration statement, we may sell common stock, preferred stock, various series of debt securities, or warrants to purchase any of such securities, either individually or in combination with other securities described in this prospectus, in one or more offerings from time to time. Selling stockholders may offer and sell, in one or more offerings, shares of our common stock as described in this prospectus or the applicable prospectus supplement. There is no limit on the aggregate amount of the securities that we or selling stockholders may offer pursuant to the registration statement of which this prospectus is a part. This prospectus provides you with a general description of the securities we, and the common stock selling stockholders, may offer.

Each time we sell any type or series of securities, or selling stockholders offer common stock, under this prospectus, we will provide a prospectus supplement that will include more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents we have incorporated by reference into this prospectus. This prospectus, together with the applicable prospectus supplement, any related free writing prospectus and the documents incorporated by reference into this prospectus and the applicable prospectus supplement, will include all material information relating to the applicable offering. Before buying any of the securities being offered, we urge you to carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectuses we have authorized for use in connection with a specific offering, together with the additional information incorporated herein by reference as described under the heading "Incorporation of Certain Information by Reference."

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

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated herein by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

The information appearing in this prospectus, any applicable prospectus supplement and any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, the prospectus supplement or any related free writing prospectus, or the time of any sale of a security.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus includes summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described under the heading "Where You Can Find More Information."

Unless otherwise stated, all references to "us," "our," "RYTM," "we," the "Company" and similar designations refer to Rhythm Pharmaceuticals, Inc. or our predecessor company, as the context may require. Our principal executive offices are located at 500 Boylston Street, 11th Floor, Boston, MA 02116, and our telephone number is (857) 264-4280.

## PROSPECTUS SUMMARY

*The following summary highlights selected information contained or incorporated by reference elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our securities, you should carefully read this entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the information under the caption "Risk Factors" herein and the applicable prospectus supplement and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the other information incorporated by reference into this prospectus, including our financial statements and the related notes, and the exhibits to the registration statement of which this prospectus is a part.*

### **Our Company**

We are a biopharmaceutical company focused on the development and commercialization of therapeutics for the treatment of rare genetic disorders that result in severe, life-threatening metabolic disorders. Our lead peptide product candidate is setmelanotide, a potent, first-in-class melanocortin-4 receptor, or MC4R, agonist for the treatment of rare genetic disorders of obesity. We believe setmelanotide, for which we have exclusive worldwide rights, has the potential to serve as replacement therapy for the treatment of melanocortin-4, or MC4, pathway deficiencies. MC4 pathway deficiencies result in the disruption of satiety signals and energy homeostasis in the body, which, in turn, leads to intense feelings of hunger and to obesity. Our development efforts are initially focused on obesity related to six single gene-related, or monogenic, MC4 pathway deficiencies, pro-opiomelanocortin, or POMC, leptin receptor, or LepR, Bardet-Biedl syndrome, Alström syndrome, POMC heterozygous and POMC epigenetic disorders for which there are currently no effective or approved treatments. We believe that the MC4 pathway is a compelling target for treating these genetic disorders because of its critical role in regulating appetite and weight by promoting satiety and weight control, and that peptide therapeutics are uniquely suited for activating this target.

We have demonstrated proof of concept in Phase 2 clinical trials in POMC deficiency obesity, LepR deficiency obesity, Bardet-Biedl syndrome and Alström syndrome, four genetic disorders of extreme and unrelenting appetite and obesity, in which setmelanotide dramatically reduced both weight and hunger. The U.S. Food and Drug Administration, or the FDA, has acknowledged the importance of these results by giving setmelanotide Breakthrough Therapy designation for the treatment of obesity associated with genetic defects upstream of the MC4 receptor in the leptin melanocortin pathways. The Breakthrough Therapy designation currently covers indications for: POMC deficiency obesity, LepR deficiency obesity, Bardet-Biedl syndrome and Alström Syndrome. Setmelanotide is currently in Phase 3 development for POMC deficiency obesity and LepR deficiency obesity, and we are initiating a combined Phase 3 trial for Bardet-Biedl and Alström syndrome. We have completed enrollment in the pivotal cohorts for both our POMC deficiency obesity Phase 3 clinical trial and our LepR deficiency obesity Phase 3 clinical trial. We expect to report initial Phase 3 data from these trials in the third quarter of 2019, and subsequently plan to file for regulatory approval for these two indications concurrently. We believe that we have demonstrated proof of concept in our Phase 2 clinical trial in Bardet-Biedl syndrome and Alström syndrome, and met with the FDA in May 2018 to discuss a combined pivotal Phase 3 clinical trial in these indications. Based on these preliminary discussions with the FDA, we currently plan to initiate this trial and enroll patients in 2018. We have an ongoing Phase 2 clinical trial in POMC heterozygous deficiency obesity and POMC epigenetic disorders. We reported initial, preliminary results in these additional Phase 2 indications in June 2018, and plan to provide a further update for these indications early in 2019. In total, approximately 300 obese subjects and patients have been treated



with setmelanotide in previous and ongoing clinical trials in which setmelanotide demonstrated statistically significant weight loss with good tolerability.

Our common stock is listed on the Nasdaq Global Market under the symbol "RYTM."

### **Corporate Information**

We are a Delaware corporation organized in February 2013 under the name Rhythm Metabolic, Inc. and as of October 2015, under the name Rhythm Pharmaceuticals, Inc.

Our principal executive offices are located at 500 Boylston Street, 11th Floor, Boston, MA 02116, and our telephone number is (857) 264-4280. Our corporate website address is [www.rhythmtx.com](http://www.rhythmtx.com). Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

This prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

### **Implications of Being an Emerging Growth Company**

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups (JOBS) Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements. These reduced reporting requirements include reduced disclosure about Rhythm's executive compensation arrangements and no non-binding advisory votes on executive compensation. We will remain an emerging growth company until the earlier of (1) December 31, 2022, and (2) the last day of the fiscal year (a) in which we have total annual gross revenue of at least \$1.07 billion, or (b) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (3) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three year period. We refer to the Jumpstart Our Business Startups Act of 2012 in this prospectus as the "JOBS Act," and references in this prospectus to "emerging growth company" shall have the meaning ascribed to it in the JOBS Act.

An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- § the ability to present only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- § an exemption from the requirements to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- § reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- § exemptions from the requirement to hold a nonbinding advisory vote on executive compensation and to obtain stockholder approval of any golden parachute payments not previously approved.

We may use these provisions until such time as we cease to be an emerging growth company.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus forms a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different from the information that you might receive from other public reporting companies in which you hold equity interests.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

## RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risks described in the documents incorporated by reference in this prospectus and any applicable prospectus supplement and any related free writing prospectus, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to the occurrence of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described above and in the documents incorporated herein by reference, including in our most recent quarterly report on Form 10-Q on file with the SEC and any amendments thereto reflected in subsequent filings with the SEC, all of which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with a specific offering.

### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the information incorporated by reference into this prospectus, contains, and any prospectus supplement 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, or the Exchange Act. You can identify these forward-looking statements by the use of words such as "outlook," "believes," "expects," "potential," "continues," "may," "will," "should," "seeks," "approximately," "predicts," "intends," "plans," "estimates," "anticipates" or the negative version of these words or other comparable words. These statements relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. We believe these factors include:

- § the success, cost and timing of our product development activities and clinical trials;
- § our ability to obtain and maintain regulatory approval for setmelanotide and our future product candidates, if any, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- § our ability to obtain funding for our operations;
- § the commercialization of setmelanotide, if approved;
- § the number of people in our target patient population;
- § our plans to research, develop and commercialize setmelanotide;
- § our ability to operate, and the implementation of our business strategy, as an independent company;
- § our ability to attract collaborators with development, regulatory and commercialization expertise;
- § our expectations regarding our ability to obtain and maintain intellectual property protection for setmelanotide;
- § future agreements with third parties in connection with the commercialization of setmelanotide or our future product candidates, if any;

- § the size and growth potential of the markets for setmelanotide, and our ability to serve those markets;
- § our expectations for the pricing of setmelanotide;
- § the rate and degree of market acceptance of setmelanotide, as well as the reimbursement coverage for setmelanotide;
- § regulatory developments in the United States, the European Union and other jurisdictions;
- § the performance of our third-party suppliers and manufacturers;
- § the extent and success of competing therapies that are or may become available;
- § our ability to attract and retain key scientific or management personnel;
- § the accuracy of our estimates regarding our target patient populations, expenses, future revenues, capital requirements and needs for additional financing;
- § our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act; and
- § our use of the proceeds from this offering.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important cautionary statements in this prospectus or in the documents incorporated by reference in this prospectus, particularly in the "Risk Factors" section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. For a summary of such factors, please refer to the section entitled "Risk Factors" in this prospectus, as updated and supplemented by the discussion of risks and uncertainties under "Risk Factors" contained in any supplements to this prospectus and in our most recent annual report on Form 10-K, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus, any prospectus supplement or in any document incorporated herein by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus, any prospectus supplement or the date of the document incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

## **USE OF PROCEEDS**

Except as described in any applicable prospectus supplement or in any related free writing prospectuses we may authorize for use in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered by us hereunder, if any, for working capital and general corporate purposes, including research and development expenses, and selling, general and administrative expenses. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from the sale of the securities offered by us hereunder. We will set forth in the applicable prospectus supplement or free writing prospectus our intended use for the net proceeds received from the sale of any securities sold pursuant to the prospectus supplement or free writing prospectus.

Shares of our common stock may be offered by selling stockholders under an applicable prospectus supplement to this prospectus. Unless the applicable prospectus supplement provides otherwise, we will not receive any of the proceeds from the sale or other disposition of shares of our common stock sold by selling stockholders in any offering by them.

## **THE SECURITIES WE MAY OFFER**

We may offer shares of our common stock and preferred stock, various series of warrants to purchase common stock or preferred stock, debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt, units or any combination thereof, and any selling stockholder may offer shares of our common stock, from time to time in one or more offerings under this prospectus at prices and on terms to be determined at the time of any offering. This prospectus provides you with a general description of the securities we and any selling stockholder may offer. Each time we or any selling stockholder offer a type or series of securities under this prospectus, we will provide a prospectus supplement or free writing prospectus, or both, that will describe the specific amounts, prices and other important terms of the securities.

## DESCRIPTION OF CAPITAL STOCK

The following is a description of certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, and certain provisions of the Delaware General Corporation Law, or DGCL. The following description does not purport to be complete and is subject to, and qualified in its entirety by reference to, our amended and restated certificate of incorporation and amended and restated bylaws, each filed as exhibits to the registration statement of which this prospectus forms a part, and the terms and provisions of the DGCL. For more complete information, you should carefully review our amended and restated certificate of incorporation and amended and restated bylaws, which have been filed with the SEC as exhibits to our registration statement of which this prospectus forms a part and which may be obtained as described below under "Where You Can Find More Information."

Our authorized capital stock consists of 120,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.

As of September 30, 2018, there were 34,382,525 shares of our common stock outstanding, held by approximately 22 stockholders of record, and there were no shares of preferred stock outstanding.

### Common Stock

Holders of shares of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. The holders of a plurality of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

Holders of shares of our common stock are entitled to receive dividends when and if declared by our board of directors out of funds legally available therefor, subject to any statutory or contractual restrictions on the payment of dividends and to any restrictions on the payment of dividends imposed by the terms of any outstanding preferred stock.

Upon our dissolution or liquidation or the sale of all or substantially all of our assets, after payment in full of all amounts required to be paid to creditors and to the holders of preferred stock having liquidation preferences, if any, the holders of shares of our common stock will be entitled to receive pro rata our remaining assets available for distribution.

Holders of shares of our common stock do not have preemptive, subscription, redemption or conversion rights.

### Preferred Stock

Our amended and restated certificate of incorporation authorizes our board of directors to establish one or more series of preferred stock (including convertible preferred stock). Unless required by law or by any stock exchange, the authorized shares of preferred stock will be available for issuance without further action by our stockholders. Our board of directors is able to determine, with respect to any series of preferred stock, the terms and rights of that series, including:

- § the designation of the series;
- § the number of shares of the series, which our board may, except where otherwise provided in the preferred stock designation, increase or decrease, but not below the number of shares then outstanding;

- § the voting rights, if any, of the holders of the series;
- § whether dividends, if any, will be cumulative or non-cumulative and the dividend rate of the series;
- § the dates at which dividends, if any, will be payable;
- § the rights of priority and amounts payable, if any, on shares of the series in the event of any voluntary or involuntary liquidation, dissolution or winding-up of the affairs of our company;
- § the redemption rights and price or prices, if any, for shares of the series;
- § the terms of any purchase, retirement or sinking fund, if any, provided for shares of the series;
- § the terms, if any, upon which the shares of the series will be convertible into or exchangeable for shares of any other class, classes or series or other securities, whether or not issued by our company or any other entity;
- § restrictions, if any, upon issuance of indebtedness of our company so long as any shares of the series are outstanding; and
- § restrictions, if any, on the issuance of shares of the same series or of any other class or series.

We could issue a series of preferred stock that could, depending on the terms of the series, impede or discourage an acquisition attempt or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which our stockholders might receive a premium for their shares of common stock over the market price of the shares of common stock.

#### **Authorized but Unissued Capital Stock**

The DGCL does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of Nasdaq, which apply so long as our common stock remains listed on Nasdaq, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

#### **Anti-Takeover Effects of Provisions of Delaware Law and Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws**

##### ***Undesignated Preferred Stock***

The ability to authorize undesignated preferred stock will make it possible for our board of directors to issue preferred stock with super voting, special approval, dividend or other rights or preferences on a discriminatory basis that could impede the success of any attempt to acquire us or otherwise effect a change in control of us. These and other provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of our company.

### **Requirements for Advance Notification of Stockholder Meetings, Nominations and Proposals**

Our amended and restated certificate of incorporation provides that special meetings of the stockholders may be called only by or at the direction of our board of directors. Our amended and restated bylaws prohibit the conduct of any business at a special meeting other than as specified in the notice for such meeting. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of our company.

Our amended and restated 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 of directors. In order for any matter to be "properly brought" before a meeting, a stockholder will have to comply with advance notice requirements and provide us with certain information. Additionally, vacancies and newly created directorships may be filled only by a vote of a majority of the directors then in office, even though less than a quorum, and not by the stockholders. Our amended and restated bylaws allow the presiding officer at a meeting of the stockholders to adopt rules and regulations for the conduct of meetings which may have the effect of precluding the conduct of certain business at a meeting if the rules and regulations are not followed. These provisions may also defer, delay or discourage a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Our amended and restated certificate of incorporation provides that the board of directors is expressly authorized to adopt, amend or repeal our amended and restated bylaws.

### **No Cumulative Voting**

The DGCL provides that stockholders are not entitled to cumulate votes in the election of directors unless our amended and restated certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation does not expressly provide for cumulative voting.

### **Removal of Directors**

In accordance with the terms of our amended and restated certificate of incorporation and amended and restated bylaws, our board of directors are divided into three staggered classes of directors of the same or nearly the same number. At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring.

- § Our Class I directors are Keith Gottesdiener and Christophe Jean, whose terms expire in 2021;
- § Our Class II directors are Ed Mathers, Todd Foley, and Neil Exter, whose terms expire in 2019; and
- § Our Class III directors are David Meeker and David McGirr, whose terms expire in 2020.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one third of the board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.



Our amended and restated certificate of incorporation and amended and restated bylaws provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the outstanding shares of capital stock entitled to vote in the election of directors or class of directors, voting together as a single class, at a meeting of the stockholders called for that purpose. This requirement of a supermajority vote to remove directors could enable a minority of our stockholders to prevent a change in the composition of our board. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by the vote of a majority of the remaining directors then in office, although less than a quorum, or by the sole remaining director.

#### ***Amendments to Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws***

The DGCL provides that, unless a corporation's certificate of incorporation provides otherwise, the affirmative vote of holders of shares constituting a majority of the votes of all shares entitled to vote may approve amendments to the certificate of incorporation.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that the affirmative vote of holders of at least 75% of the outstanding shares of capital stock, voting together as a single class, and entitled to vote in the election of directors will be required to amend, alter, change or repeal the amended and restated certificate of incorporation and the amended and restated bylaws. This requirement of a supermajority vote to approve amendments to our amended and restated certificate of incorporation and amended and restated bylaws could enable a minority of our stockholders to exercise veto power over such amendments.

#### ***Stockholder Action by Written Consent***

Pursuant to Section 228 of the DGCL, any action required to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote if a consent or consents in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares of our stock entitled to vote thereon were present and voted, unless the corporation's certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation prohibits the taking of any action of our stockholders by written consent without a meeting.

#### ***Delaware Anti-Takeover Statute***

We have not opted out of, and therefore are subject to, Section 203 of the DGCL. Section 203 provides that, subject to certain exceptions specified in the law, a publicly-held Delaware corporation shall not engage in certain "business combinations" with any "interested stockholder" for a three-year period after the date of the transaction in which the person became an interested stockholder unless:

- § prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- § upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (1) shares owned by persons who are directors and also officers and (2) shares owned under employee stock plans in which employee participants

do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

§ on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. Since Section 203 will apply to us, we expect that it would have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. In such event, we would also anticipate that Section 203 could discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Under certain circumstances, Section 203 makes it more difficult for a person who would be an "interested stockholder" to effect various business combinations with a corporation for a three-year period. The provisions of Section 203 may encourage companies interested in acquiring our company to negotiate in advance with our board of directors because the stockholder approval requirement would be avoided if our board of directors approves either the business combination or the transaction that results in the stockholder becoming an interested stockholder. These provisions also may make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

## **Registration Rights**

As of September 30, 2018, the holders of approximately 12.0 million shares of our common stock, or their transferees, are entitled to the registration rights set forth below with respect to registration of the resale of such shares under the Securities Act pursuant to the investors' rights agreement, by and among us and certain of our stockholders.

### ***Demand Registration Rights***

Upon the written request of at least a majority of the holders of the registrable securities then outstanding that we file a registration statement under the Securities Act covering the registration of registrable securities owned by such holder(s) having an anticipated aggregate offering price, net of selling expenses, of at least \$15.0 million, we will be obligated to notify all holders of registrable securities of such request. As soon as practicable thereafter, and in any event within 60 days after the date such request is received, we will be required to register the sale on a registration statement on Form S-1 of all registrable securities that holders may request to be registered, subject to specified exceptions, conditions and limitations. We may postpone the filing of a registration statement for up to 120 days once in any 12-month period if in the good faith judgment of our board of directors such registration would be materially detrimental to us, and we are not required to effect the filing of a registration statement during the period starting with the date that is 60 days prior to our good faith estimate of the date of filing of a registration statement initiated by us and ending on a date 180 days after the effective date of a registration statement initiated by us. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement.

### **"Piggyback" Registration Rights**

If we register any securities for public sale, holders of registration rights will have the right to include their shares in the registration statement. The underwriters of any underwritten offering will have the right to limit the number of registrable securities to be included in the registration statement, but such number may not be below 30% of the total number of shares included in such registration statement. The holders of registration rights have waived any and all rights to which they would otherwise be entitled to have their shares included in this offering.

### **Form S-3 Registration Rights**

If we are eligible to file a registration statement on Form S-3, holders of at least 10% of our registrable securities then outstanding have the right to request that we file a registration statement on Form S-3, so long as the aggregate price to the public of the securities to be sold under the registration statement on Form S-3 is at least \$10.0 million or consists of all the remaining registrable securities, and subject to specified exceptions, conditions and limitations.

### **Expenses of Registration**

Pursuant to the investors' rights agreement, we are generally required to bear all registration expenses, including the fees and expenses of one counsel, not to exceed \$50,000, representing the selling holders, incurred in connection with the demand, piggyback and Form S-3 registrations described above. We are not required to bear selling expenses, which include all underwriting discounts, selling commissions, stock transfer taxes applicable to the sale of registrable securities and fees and disbursements of any additional counsel for any selling holder. We are not required to pay registration expenses if the registration request under the investors' rights agreement is withdrawn at the request of the holders of a majority of the registrable securities unless (i) the holders of a majority of the registrable securities then outstanding agree to forfeit their right to one registration under the investors' rights agreement or (ii) the withdrawal is due to the discovery of a material adverse change in our business.

### **Termination of Registration Rights**

The demand, piggyback and Form S-3 registration rights discussed above will terminate as to a given holder of registrable securities upon the earlier of (i) five years following the closing of our initial public offering or (ii) such time as SEC Rule 144 or another similar exemption under the Securities Act is available for the sale of all shares held by the holder during a three-month period without registration and without the requirement for us to be in compliance with the current public information required under SEC Rule 144(c)(1).

### **Market Listing**

Our common stock is listed on the Nasdaq Global Market under the symbol "RYTM."

### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Computershare Trust Company, Inc. The transfer agent and registrar's address is 250 Royall Street, Canton, MA 02021.

## DESCRIPTION OF DEBT SECURITIES

The following is a general description of the terms of debt securities we may issue from time to time unless we provide otherwise in the applicable prospectus supplement. Particular terms of any debt securities we offer will be described in the prospectus supplement relating to such debt securities.

As required by Federal law for all bonds and notes of companies that are publicly offered, any debt securities we issue will be governed by a document called an "indenture," the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. We have summarized the general features of the debt securities to be governed by the indenture. The summary is not complete. An indenture is a contract between us and a financial institution acting as trustee on behalf of the holders of the debt securities, and is subject to and governed by the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. The trustee has two main roles. First, the trustee can enforce holders' rights against us if we default. There are some limitations on the extent to which the trustee acts on holders' behalf, described in the second paragraph under "Description of Debt Securities—Events of Default." Second, the trustee performs certain administrative duties, such as sending interest and principal payments to holders.

We will issue any senior or subordinated debt securities under a senior or subordinated indenture, as applicable, that we will enter into with the trustee named in the subordinated indenture. We have filed a form of senior indenture and a form of subordinated indenture as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC. The indentures will be qualified under the Trust Indenture Act.

Because this section is a summary, it does not describe every aspect of any debt securities we may issue or the indenture governing any such debt securities. Particular terms of any debt securities we offer will be described in the prospectus supplement relating to such debt securities, and we urge you to read the applicable executed indenture, which will be filed with the SEC at the time of any offering of debt securities, because it, and not this description, will define the rights of holders of such debt securities.

A prospectus supplement will describe the particular terms of any series of debt securities we may issue, including some or all of the following:

- § the designation or title of the series of debt securities;
- § the total principal amount of the series of debt securities, the denominations in which the offered debt securities will be issued and whether the offering may be reopened for additional securities of that series and on what terms;
- § the percentage of the principal amount at which the series of debt securities will be offered;
- § the date or dates on which principal will be payable;
- § the rate or rates (which may be either fixed or variable) and/or the method of determining such rate or rates of interest, if any;
- § the date or dates from which any interest will accrue, or the method of determining such date or dates, and the date or dates on which any interest will be payable;
- § the terms for redemption, extension or early repayment, if any;
- § the currencies in which the series of debt securities are issued and payable;

- § whether the amount of payments of principal, interest or premium, if any, on a series of debt securities will be determined with reference to an index, formula or other method and how these amounts will be determined;
- § the place or places of payment, transfer, conversion and/or exchange of the debt securities;
- § the provision for any sinking fund;
- § any restrictive covenants;
- § events of default;
- § whether the series of debt securities are issuable in certificated form;
- § any provisions for legal defeasance or covenant defeasance;
- § whether and under what circumstances we will pay additional amounts in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities rather than pay the additional amounts (and the terms of this option);
- § any provisions for convertibility or exchangeability of the debt securities into or for any other securities;
- § whether the debt securities are subject to subordination and the terms of such subordination;
- § any listing of the debt securities on any securities exchange;
- § if applicable, a discussion of certain U.S. Federal income tax considerations, including those related to original issue discount, if applicable; and
- § any other material terms.

The debt securities may be secured or unsecured obligations. Unless the prospectus supplement states otherwise, principal, interest and premium, if any, will be paid by us in immediately available funds.

## General

The indenture may provide that any debt securities proposed to be sold under this prospectus and the applicable prospectus supplement relating to such debt securities ("offered debt securities") and any debt securities issuable upon conversion or exchange of other offered securities ("underlying debt securities") may be issued under the indenture in one or more series.

For purposes of this prospectus, any reference to the payment of principal of, or interest or premium, if any, on, debt securities will include additional amounts if required by the terms of the debt securities.

Debt securities issued under an indenture, when a single trustee is acting for all debt securities issued under the indenture, are called the "indenture securities." The indenture may also provide that there may be more than one trustee thereunder, each with respect to one or more different series of securities issued thereunder. See "Description of Debt Securities—Resignation of Trustee" below. At a time when two or more trustees are acting under an indenture, each with respect to only certain series, the term "indenture securities" means the one or more series of debt securities with respect to which each respective trustee is acting. In the event that there is more than one trustee under an indenture, the powers and trust obligations of each trustee described in this prospectus will extend only to the one or more series of indenture securities for which it is trustee. If two or more trustees are acting under an indenture, then the indenture securities for which each trustee is acting would be treated as if issued under separate indentures.

We refer you to the applicable prospectus supplement relating to any debt securities we may issue from time to time for information with respect to any deletions from, modifications of or additions to the Events of Default or covenants that are described below, including any addition of a

covenant or other provision providing event risk or similar protection, that will be applicable with respect to such debt securities.

We have the ability to issue indenture securities with terms different from those of indenture securities previously issued and, without the consent of the holders thereof, to reopen a previous issue of a series of indenture securities and issue additional indenture securities of that series unless the reopening was restricted when that series was created.

### **Conversion and Exchange**

If any debt securities are convertible into or exchangeable for other securities, the related prospectus supplement will explain the terms and conditions of the conversion or exchange, including the conversion price or exchange ratio (or the calculation method), the conversion or exchange period (or how the period will be determined), if conversion or exchange will be mandatory or at the option of the holder or us, provisions for adjusting the conversion price or the exchange ratio and provisions affecting conversion or exchange in the event of the redemption of the underlying debt securities. These terms may also include provisions under which the number or amount of other securities to be received by the holders of the debt securities upon conversion or exchange would be calculated according to the market price of the other securities as of a time stated in the prospectus supplement.

### **Payment and Paying Agents**

We will pay interest to the person listed in the applicable trustee's records as the owner of the debt security at the close of business on a particular day in advance of each due date for interest, even if that person no longer owns the debt security on the interest due date. That day, often approximately two weeks in advance of the interest due date, is called the "record date." Because we will pay all the interest for an interest period to the holders on the record date, holders buying and selling debt securities must work out between themselves the appropriate purchase price. The most common manner is to adjust the sales price of the debt securities to prorate interest fairly between buyer and seller based on their respective ownership periods within the particular interest period. This prorated interest amount is called "accrued interest."

### **Events of Default**

Holders of debt securities of any series will have rights if an Event of Default occurs in respect of the debt securities of such series and is not cured, as described later in this subsection. The term "Event of Default" in respect of the debt securities of any series means any of the following:

- § we do not pay the principal of, or any premium on, a debt security of the series on its due date;
- § we do not pay interest on a debt security of the series within 30 days of its due date;
- § we do not deposit any sinking fund payment in respect of debt securities of the series on its due date and we do not cure this default within five days;
- § we remain in breach of a covenant in respect of debt securities of the series for 90 days after we receive a written notice of default stating we are in breach. The notice must be sent by either the trustee or holders of at least 25% of the principal amount of debt securities of the series;
- § we file for bankruptcy or certain other events of bankruptcy, insolvency or reorganization occur; and
- § any other Event of Default occurs in respect of debt securities of the series described in the prospectus supplement.

An Event of Default for a particular series of debt securities does not necessarily constitute an Event of Default for any other series of debt securities issued under the same or any other indenture. The trustee may withhold notice to the holders of debt securities of any default, except in the payment of principal, premium or interest, if it considers the withholding of notice to be in the best interests of the holders.

### **Remedies if an Event of Default Occurs**

If an Event of Default has occurred and has not been cured or waived, the trustee or the holders of not less than 25% in principal amount of the debt securities of the affected series may declare the entire principal amount of all the debt securities of that series to be due and immediately payable. This is called a declaration of acceleration of maturity. A declaration of acceleration of maturity may be canceled by the holders of a majority in principal amount of the debt securities of the affected series if the default is cured or waived and certain other conditions are satisfied.

Except in cases of default, where the trustee has some special duties, the trustee typically is not required to take any action under an indenture at the request of any holders unless the holders offer the trustee reasonable protection from expenses and liability (called an "indemnity"). If reasonable indemnity is provided, the holders of a majority in principal amount of the outstanding debt securities of the relevant series may direct the time, method and place of conducting any lawsuit or other formal legal action seeking any remedy available to the trustee. The trustee may refuse to follow those directions in certain circumstances.

Before a holder is allowed to bypass the trustee and bring its own lawsuit or other formal legal action or take other steps to enforce its rights or protect its interests relating to any debt securities, the following must occur:

- § the holder must give the trustee written notice that an Event of Default has occurred and remains uncured;
- § the holders of at least 25% in principal amount of all outstanding debt securities of the relevant series must make a written request that the trustee take action because of the default and must offer reasonable indemnity to the trustee against the cost and other liabilities of taking that action;
- § the trustee must not have taken action for 60 days after receipt of the above notice and offer of indemnity; and
- § the holders of a majority in principal amount of the debt securities must not have given the trustee a direction inconsistent with the above notice during that 60-day period.

However, a holder is entitled at any time to bring a lawsuit for the payment of money due on its debt securities on or after the due date. Each year, we will furnish to each trustee a written statement of certain of our officers certifying that to their knowledge we are in compliance with the indenture and the debt securities, or else specifying any default.

### **Waiver of Default**

The holders of a majority in principal amount of the relevant series of debt securities may waive a default for all such series of debt securities. If this happens, the default will be treated as if it had not occurred. No one can waive a payment default on a holder's debt security, however, without the holder's approval.

## **Merger or Consolidation**

Under the terms of an indenture, we may be permitted to consolidate or merge with another entity. We may also be permitted to sell all or substantially all of our assets to another entity. However, typically we may not take any of these actions unless all the following conditions are met:

- § if we do not survive such transaction or we convey, transfer or lease our properties and assets substantially as an entirety, the acquiring company must be a corporation, limited liability company, partnership or trust, or other corporate form, organized under the laws of any state of the United States or the District of Columbia, and such company must agree to be legally responsible for our debt securities, and, if not already subject to the jurisdiction of any state of the United States or the District of Columbia, the new company must submit to such jurisdiction for all purposes with respect to the debt securities and appoint an agent for service of process;
- § alternatively, we must be the surviving company;
- § immediately after the transaction no Event of Default will exist;
- § we must deliver certain certificates and documents to the trustee; and
- § we must satisfy any other requirements specified in the prospectus supplement relating to a particular series of debt securities.

## **Modification or Waiver**

There are three types of changes we may make to an indenture and the debt securities issued thereunder.

### ***Changes Requiring Approval***

First, there are changes that we cannot make to debt securities without specific approval of all of the holders. The following is a list of the types of changes that may require specific approval:

- § change the stated maturity of the principal or rate of interest on a debt security;
- § reduce any amounts due on a debt security;
- § reduce the amount of principal payable upon acceleration of the maturity of a security following a default;
- § at any time after a change of control has occurred, reduce any premium payable upon a change of control;
- § change the place or currency of payment on a debt security (except as otherwise described in the prospectus or prospectus supplement);
- § impair the right of holders to sue for payment;
- § adversely affect any right to convert or exchange a debt security in accordance with its terms;
- § reduce the percentage of holders of debt securities whose consent is needed to modify or amend the indenture;
- § reduce the percentage of holders of debt securities whose consent is needed to waive compliance with certain provisions of the indenture or to waive certain defaults;
- § modify any other aspect of the provisions of the indenture dealing with supplemental indentures, modification and waiver of past defaults, changes to the quorum or voting requirements or the waiver of certain covenants; and
- § change any obligation we have to pay additional amounts.

### ***Changes Not Requiring Approval***

The second type of change does not require any vote by the holders of the debt securities. This type is limited to clarifications and certain other changes that would not adversely affect holders of



the outstanding debt securities in any material respect, including the addition of covenants and guarantees. We also do not need any approval to make any change that affects only debt securities to be issued under the indenture after the change takes effect.

### ***Changes Requiring Majority Approval***

Any other change to the indenture and the debt securities may require the following approval:

- § if the change affects only one series of debt securities, it must be approved by the holders of a majority in principal amount of that series; and
- § if the change affects more than one series of debt securities issued under the same indenture, it must be approved by the holders of a majority in principal amount of all of the series affected by the change, with all affected series voting together as one class for this purpose.

The holders of a majority in principal amount of all of the series of debt securities issued under an indenture, voting together as one class for this purpose, may waive our compliance obligations with respect to some of our covenants in that indenture. However, we cannot obtain a waiver of a payment default or of any of the matters covered by the bullet points included above under "Description of Debt Securities—Modification or Waiver—Changes Requiring Approval."

### ***Further Details Concerning Voting***

When taking a vote on proposed changes to the indenture and the debt securities, we expect to use the following rules to decide how much principal to attribute to a debt security:

- § for original issue discount securities, we will use the principal amount that would be due and payable on the voting date if the maturity of these debt securities were accelerated to that date because of a default;
- § for debt securities whose principal amount is not known (for example, because it is based on an index), we will use a special rule for that debt security described in the related prospectus supplement; and
- § for debt securities denominated in one or more foreign currencies, we will use the U.S. dollar equivalent.

Debt securities will not be considered outstanding, and therefore not eligible to vote, if we have deposited or set aside in trust money for their payment or redemption. Debt securities will also not be eligible to vote if they have been fully defeased as described later under "Description of Debt Securities—Defeasance—Legal Defeasance."

We generally will be entitled to set any day as a record date for the purpose of determining the holders of outstanding indenture securities that are entitled to vote or take other action under the indenture. If we set a record date for a vote or other action to be taken by holders of one or more series, that vote or action may be taken only by persons who are holders of outstanding indenture securities of those series on the record date and must be taken within 11 months following the record date.

Book-entry and other indirect holders will need to consult their banks or brokers for information on how approval may be granted or denied if we seek to change the indenture or the debt securities or request a waiver.

## **Defeasance**

The following provisions will be applicable to each series of debt securities unless we state in the applicable prospectus supplement that the provisions of covenant defeasance and legal defeasance will not be applicable to that series.

### ***Covenant Defeasance***

We can make the deposit described below and be released from some of the restrictive covenants in the indenture under which the particular series was issued. This is called "covenant defeasance." In that event, the holders would lose the protection of those restrictive covenants but would gain the protection of having money and government securities set aside in trust to repay holders' debt securities. If applicable, a holder also would be released from the subordination provisions described under "Description of Debt Securities—Indenture Provisions—Subordination" below. In order to achieve covenant defeasance, we must do the following:

- § If the debt securities of the particular series are denominated in U.S. dollars, we must deposit in trust for the benefit of all holders of such debt securities a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates;
- § We may be required to deliver to the trustee a legal opinion of our counsel confirming that, under current U.S. Federal income tax law, we may make the above deposit without causing the holders to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity; and
- § We must deliver to the trustee certain documentation stating that all conditions precedent to covenant defeasance have been complied with.

If we accomplish covenant defeasance, holders can still look to us for repayment of the debt securities if there were a shortfall in the trust deposit or the trustee is prevented from making payment. In fact, if one of the remaining Events of Default occurred (such as our bankruptcy) and the debt securities became immediately due and payable, there might be a shortfall. Depending on the event causing the default, holders may not be able to obtain payment of the shortfall.

### ***Legal Defeasance***

As described below, we can legally release ourselves from all payment and other obligations on the debt securities of a particular series (called "legal defeasance"), (1) if there is a change in U.S. Federal tax law that allows us to effect the release without causing the holders to be taxed any differently than if the release had not occurred, and (2) if we put in place the following other arrangements for holders to be repaid:

- § If the debt securities of the particular series are denominated in U.S. dollars, we must deposit in trust for the benefit of all holders of such debt securities a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates;
- § We may be required to deliver to the trustee a legal opinion confirming that there has been a change in current U.S. Federal tax law or an Internal Revenue Service ruling that allows us to make the above deposit without causing the holders to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity. Under current U.S. Federal tax law, the deposit and our legal release from the debt securities would be treated as though we paid each holder its

share of the cash and notes or bonds at the time the cash and notes or bonds were deposited in trust in exchange for its debt securities and holders would recognize gain or loss on the debt securities at the time of the deposit; and

§ We must deliver to the trustee a legal opinion and officers' certificate stating that all conditions precedent to legal defeasance have been complied with.

If we ever did accomplish legal defeasance, as described above, holders would have to rely solely on the trust deposit for repayment of the debt securities. Holders could not look to us for repayment in the unlikely event of any shortfall. Conversely, the trust deposit would most likely be protected from claims of our lenders and other creditors if we ever became bankrupt or insolvent. If applicable, holders would also be released from the subordination provisions described later under "Description of Debt Securities—Indenture Provisions—Subordination."

### **Resignation of Trustee**

Each trustee may resign or be removed with respect to one or more series of indenture securities provided that a successor trustee is appointed to act with respect to such series. In the event that two or more persons are acting as trustee with respect to different series of indenture securities under the indenture, each of the trustees will be a trustee of a trust separate and apart from the trust administered by any other trustee.

### **Indenture Provisions—Subordination**

Upon any distribution of our assets upon our dissolution, winding up, liquidation or reorganization, the payment of the principal of (and premium, if any) and interest on any indenture securities denominated as subordinated debt securities is to be subordinated to the extent provided in the indenture in right of payment to the prior payment in full of all Senior Indebtedness (defined below), but our obligation to holders to make payment of the principal of (and premium, if any) and interest on such subordinated debt securities will not otherwise be affected. In addition, no payment on account of principal (or premium, if any), interest or sinking fund, if any, may be made on such subordinated debt securities at any time unless full payment of all amounts due in respect of the principal (and premium, if any), interest and sinking fund, if any, 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 from us is received by the trustee in respect of subordinated debt securities or by the holders of any of such subordinated debt securities before all Senior Indebtedness is paid in full, the payment or distribution must be paid over to the holders of the Senior Indebtedness or on their behalf for application to the payment of all the Senior Indebtedness remaining unpaid until all the Senior Indebtedness has been paid in full, after giving effect to any concurrent payment or distribution to the holders of the Senior Indebtedness. Subject to the payment in full of all Senior Indebtedness, the holders of such subordinated debt securities will be subrogated to the rights of the holders of the Senior Indebtedness to the extent of payments made to the holders of the Senior Indebtedness out of the distributive share of such subordinated debt securities.

By reason of this subordination, in the event of a distribution of our assets upon our insolvency, certain of our senior creditors may recover more, ratably, than holders of any subordinated debt securities. The related indenture will provide that these subordination provisions will not apply to money and securities held in trust under the defeasance provisions of the indenture.

"Senior Indebtedness" will be defined in an applicable indenture as the principal of (and premium, if any) and unpaid interest on:

- § our indebtedness (including indebtedness of others guaranteed by us), whenever created, incurred, assumed or guaranteed, for money borrowed (other than indenture securities issued under the indenture and denominated as subordinated debt securities), unless in the instrument creating or evidencing the same or under which the same is outstanding it is provided that this indebtedness is not senior or prior in right of payment to the subordinated debt securities; and
- § renewals, extensions, modifications and refinancings of any of such indebtedness.

The prospectus supplement accompanying any series of indenture securities denominated as subordinated debt securities will set forth the approximate amount of our Senior Indebtedness outstanding as of a recent date.

#### **Trustee**

We intend to name the indenture trustee for each series of indenture securities in the related prospectus supplement.

#### **Certain Considerations Relating to Foreign Currencies**

Debt securities denominated or payable in foreign currencies may entail significant risks. These risks include the possibility of significant fluctuations in the foreign currency markets, the imposition or modification of foreign exchange controls and potential illiquidity in the secondary market. These risks will vary depending upon the currency or currencies involved and will be more fully described in the applicable prospectus supplement.

## DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of our common stock, shares of our preferred stock or debt securities. The following description sets forth certain general terms and provisions of the warrants that we may offer pursuant to this prospectus. The particular terms of the warrants and the extent, if any, to which the general terms and provisions may apply to the warrants so offered will be described in the applicable prospectus supplement.

Warrants may be issued independently or together with other securities and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the warrants and will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

A copy of the forms of the warrant agreement and the warrant certificate relating to any particular issue of warrants will be filed with the SEC each time we issue warrants, and you should read those documents for provisions that may be important to you. For more information on how you can obtain copies of the forms of the warrant agreement and the related warrant certificate, see "Where You Can Find More Information."

### Stock Warrants

The prospectus supplement relating to a particular issue of warrants to issue shares of our common stock or shares of our preferred stock will describe the terms of the common share warrants and preferred share warrants, including the following:

- § the title of the warrants;
- § the offering price for the warrants, if any;
- § the aggregate number of the warrants;
- § the designation and terms of the shares of common stock or shares of preferred stock that may be purchased upon exercise of the warrants;
- § the terms for changes or adjustments to the exercise price of the warrants;
- § if applicable, the designation and terms of the securities that the warrants are issued with and the number of warrants issued with each security;
- § if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;
- § the number of shares of common stock or shares of preferred stock that may be purchased upon exercise of a warrant and the price at which the shares may be purchased upon exercise;
- § the dates on which the right to exercise the warrants commence and expire;
- § if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- § the currency or currency units in which the offering price, if any, and the exercise price are payable;
- § if applicable, a discussion of material United States federal income tax considerations;
- § anti-dilution provisions of the warrants, if any;
- § redemption or call provisions, if any, applicable to the warrants;
- § any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants; and
- § any other information we think is important about the warrants.

## Debt Warrants

The prospectus supplement relating to a particular issue of warrants to issue debt securities will describe the terms of those warrants, including the following:

- § the title of the warrants;
- § the offering price for the warrants, if any;
- § the aggregate number of the warrants;
- § the designation and terms of the debt securities purchasable upon exercise of the warrants;
- § the terms for changes or adjustments to the exercise price of the warrants;
- § if applicable, the designation and terms of the debt securities that the warrants are issued with and the number of warrants issued with each debt security;
- § if applicable, the date from and after which the warrants and any debt securities issued with them will be separately transferable;
- § the principal amount of debt securities that may be purchased upon exercise of a warrant and the price at which the debt securities may be purchased upon exercise;
- § the dates on which the right to exercise the warrants will commence and expire;
- § if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- § whether the warrants represented by the warrant certificates or debt securities that may be issued upon exercise of the warrants will be issued in registered or bearer form;
- § information relating to book-entry procedures, if any;
- § the currency or currency units in which the offering price, if any, and the exercise price are payable;
- § if applicable, a discussion of material United States federal income tax considerations;
- § anti-dilution provisions of the warrants, if any;
- § redemption or call provisions, if any, applicable to the warrants;
- § any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants; and
- § any other information we think is important about the warrants.

## Exercise of Warrants

Each warrant will entitle the holder of the warrant to purchase at the exercise price set forth in the applicable prospectus supplement the number of shares of common stock, shares of preferred stock or the principal amount of debt securities being offered. Holders may exercise warrants at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants are void. Holders may exercise warrants as set forth in the prospectus supplement relating to the warrants being offered.

Until a holder exercises the warrants to purchase our shares of common stock, shares of preferred stock or debt securities, the holder will not have any rights as a holder of our shares of common stock, shares of preferred stock or debt securities, as the case may be, by virtue of ownership of warrants.

## DESCRIPTION OF UNITS

We may issue, in one or more series, units consisting of common stock, preferred stock, or warrants for the purchase of common stock or preferred stock in any combination. We urge you to read the applicable prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of units being offered, as well as the complete unit agreement that contains the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

Units may be issued under a unit agreement that we enter into with a unit agent. We will indicate the name and address of the unit agent, if applicable, in the prospectus supplement relating to the particular series of units being offered.

The applicable prospectus supplement may describe:

- § the designation and terms of the units and of the securities composing 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 composing the units; and
- § whether the units will be issued in fully registered or global form.

## SELLING STOCKHOLDERS

Selling stockholders are persons or entities that, directly or indirectly, have acquired or will from time to time acquire from us, our securities. If the registration statement of which this prospectus is a part is used by any selling stockholder for the resale of any shares of our common stock registered thereunder, information about such selling stockholder, its beneficial ownership of our securities and its relationship with us will be set forth in a supplement to this prospectus, or in one or more documents incorporated by reference into this prospectus or the applicable prospectus supplement. The applicable prospectus supplement will also disclose whether any of the selling stockholders has held any position or office with, has been employed by or otherwise has had a material relationship with us during the three years prior to the date of the applicable prospectus supplement.

## PLAN OF DISTRIBUTION

We and any selling stockholder may sell our securities from time to time:

- § to or through underwriters;
- § through dealers;
- § through agents;
- § directly to one or more purchasers;
- § ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- § block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- § in "at the market offerings," within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- § purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- § an exchange distribution in accordance with the rules of the applicable exchange; or
- § through a combination of any of these methods or any other method permitted by law.

We or selling stockholders may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. In any applicable prospectus supplement relating to such offering, we will name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions that we or selling stockholders must pay to any such agent. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of our securities stock may be effected from time to time in one or more transactions:

- § at a fixed price, or prices, which may be changed from time to time;
- § at market prices prevailing at the time of sale;
- § at prices related to such prevailing market prices; or
- § at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you with respect to a particular offering) will describe the terms of the offering of our securities, including the following:

- § the name or names of the agent or any underwriters;
- § the name or names of the selling stockholders, if any;
- § the public offering or purchase price of the securities or other consideration therefor, and the proceeds, if any, we will receive from the sale;
- § any over-allotment options under which underwriters may purchase additional securities from us or any selling stockholders;
- § any agency fees or underwriting discounts and commissions to be allowed or paid to the agent or underwriters;



- § all other items constituting underwriting compensation;
- § any discounts and commissions to be allowed or paid to dealers; and
- § any securities exchange or market on which the securities will be listed.

If any underwriters or agents are used in the sale of our securities in respect of which this prospectus is delivered, we or selling stockholders will enter into an underwriting agreement, sales agreement or other agreement with them at the time of sale to them, and we will set forth in the applicable prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

We may offer the securities, and selling stockholders may sell shares of our common stock, to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. In connection with the offering of securities, we or selling stockholders may grant to the underwriters an option to purchase additional securities with an additional underwriting commission, as may be set forth in the applicable prospectus supplement.

If a dealer is used in the sale of the securities in respect of which the prospectus is delivered, we, a selling stockholders, or an underwriter will sell such securities to the dealer, as principal. The dealer, who may be deemed to be an "underwriter" as that term is defined in the Securities Act, may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

We or selling stockholders may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to those liabilities.

Selling stockholders may be deemed to be underwriters under the Securities Act in connection with the common stock they resell and any profits on the sales may be deemed to be underwriting discounts and commissions under the Securities Act.

If so indicated in the applicable prospectus supplement, we or selling stockholders will authorize underwriters or other persons acting as agents to solicit offers by certain institutions to purchase securities from us or selling stockholders pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the applicable prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the applicable prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions. Delayed delivery contracts will not be subject to any conditions except that:

- § the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- § if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery.

Offered securities may also be offered and sold, if so indicated in the applicable prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as

principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreement, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters in connection with their remarketing of offered securities.

Certain agents, underwriters and dealers, and their associates and affiliates, may be customers of, have borrowing relationships with, engage in other transactions with, or perform services, including investment banking services, for us or selling stockholders or one or more of our respective affiliates in the ordinary course of business for which they receive compensation.

In order to facilitate the offering of our securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of our securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, 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 so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in 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 stock, and may use securities received in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than two scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the second business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than two scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting

underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The anticipated date of delivery of offered securities will be set forth in the applicable prospectus supplement relating to each offer.

## LEGAL MATTERS

Certain legal matters, including the validity of the issuance of the securities offered, will be passed upon for us by Morgan, Lewis & Bockius LLP, Boston, Massachusetts.

## EXPERTS

The consolidated financial statements of Rhythm Pharmaceuticals, Inc. appearing in Rhythm Pharmaceutical's Current Report on Form 8-K dated November 9, 2018 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the report of Ernst & Young LLP pertaining to such financial statements to the extent covered by consents filed with the Securities and Exchange Commission given on the authority of such firm as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Exchange Act, and in accordance with the Exchange Act, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet ([www.sec.gov](http://www.sec.gov)). Our corporate website address is [www.rhythmtx.com](http://www.rhythmtx.com). Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information contained in documents that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC before the date of this prospectus, while information that we file later with the SEC will automatically update and supersede prior information. Any information so updated and superseded shall not be deemed, except as so updated and superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of the offering. Notwithstanding the foregoing, unless specifically stated to the contrary, none of the information that is not deemed "filed" with the SEC, including information furnished under Items 2.02 or 7.01 of any Current Report on Form 8-K, will be incorporated by reference into, or otherwise included in, this prospectus:

1. our annual report on Form 10-K for the fiscal year ended December 31, 2017 filed with the SEC on March 12, 2018 (the "Form 10-K");
2. the information contained in our definitive proxy statement on Schedule 14A for our 2018 annual meeting of stockholders filed with the SEC on April 30, 2018, to the extent incorporated by reference in Part III of the Form 10-K;
3. our quarterly reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, filed with the SEC on May 14, 2018, August 8, 2018 and November 9, 2018, respectively;
4. our current reports on Form 8-K filed with the SEC on March 12, 2018 (not including any information furnished under Item 2.02 or 9.01 of such Form 8-K or any other information that is identified as "furnished" rather than filed, which information is not incorporated by reference herein), April 2, 2018, June 11, 2018, August 9, 2018 and November 9, 2018; and
5. our description of our common stock contained in the registration statement on Form 8-A, filed on September 29, 2017, and all amendments and reports updating such description.

We make available, free of charge, through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may also obtain, free of charge, a copy of any of these documents (other than exhibits to these documents unless the exhibits are specifically incorporated by reference into these documents or referred to in this prospectus) by writing or calling us at the following address and telephone number:

Rhythm Pharmaceuticals, Inc.  
500 Boylston Street  
11th Floor  
Boston, Massachusetts 02116  
(857) 264-4280

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.



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

---

**PROSPECTUS**

---

November 9, 2018

---

---



Up to \$100,000,000

---

## Rhythm Pharmaceuticals, Inc.

### Common Stock

---

We have entered into a sales agreement with Cowen and Company, LLC, or Cowen, relating to shares of our common stock offered by this prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$100 million from time to time through Cowen, acting as our agent.

Our common stock is traded on the Nasdaq Global Market under the symbol "RYTM." The last reported sale price of our common stock on the Nasdaq Global Market on November 8, 2018 was \$31.34 per share.

Sales of our common stock, if any, under this prospectus may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a) (4) promulgated under the Securities Act of 1933, as amended, or the Securities Act, including sales made into the Nasdaq Global Market or any other existing trading market for our common stock. Cowen is not required to sell any specific number or dollar amount of securities, but will act as a sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Cowen and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to Cowen for sales of common stock sold pursuant to the sales agreement will be equal to 3% of the aggregate gross proceeds of any shares of common stock sold under the sales agreement. In connection with the sale of the common stock on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cowen will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Cowen with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act.

---

***Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in this prospectus supplement beginning on page S-6 and under similar headings in the other documents that are 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 supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

**Cowen**

November 9, 2018

---

---

**TABLE OF CONTENTS**

|  | <b>Page</b>          |
|--|----------------------|
| <a href="#">ABOUT THIS PROSPECTUS</a>                                | <a href="#">S-1</a>  |
| <a href="#">PROSPECTUS SUMMARY</a>                                   | <a href="#">S-2</a>  |
| <a href="#">THE OFFERING</a>   | <a href="#">S-4</a>  |
| <a href="#">RISK FACTORS</a>   | <a href="#">S-6</a>  |
| <a href="#">CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</a> | <a href="#">S-8</a>  |
| <a href="#">USE OF PROCEEDS</a>                                      | <a href="#">S-10</a> |
| <a href="#">DIVIDEND POLICY</a>                                      | <a href="#">S-10</a> |
| <a href="#">DILUTION</a>   | <a href="#">S-11</a> |
| <a href="#">PLAN OF DISTRIBUTION</a>                                 | <a href="#">S-13</a> |
| <a href="#">LEGAL MATTERS</a>  | <a href="#">S-15</a> |
| <a href="#">EXPERTS</a>  | <a href="#">S-15</a> |
| <a href="#">WHERE YOU CAN FIND MORE INFORMATION</a>                  | <a href="#">S-15</a> |
| <a href="#">INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</a>    | <a href="#">S-16</a> |

---



## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may from time to time sell shares of our common stock having an aggregate offering price of up to \$100,000,000 under this prospectus at prices and on terms to be determined by market conditions at the time of the offering. In connection with such offers and when accompanied by the base prospectus included in the registration statement of which this prospectus forms a part, this prospectus will be deemed a prospectus supplement to such base prospectus.

Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus and all of the information incorporated by reference herein and therein, as well as the additional information described under the headings "Where You Can Find More Information" and "Incorporation of Certain Information by Reference." These documents contain important information that you should consider when making your investment decision.

To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference in this prospectus, on the other hand, you should rely on the information in this prospectus. 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—the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in or incorporated by reference in this prospectus and any related free writing prospectus filed by us with the SEC. We have not, and Cowen has not, authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless otherwise stated, all references to "us," "our," "RYTM," "we," the "Company" and similar designations refer to Rhythm Pharmaceuticals, Inc. or our predecessor company, as the context may require.

## PROSPECTUS SUMMARY

*The following summary highlights selected information contained or incorporated by reference elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our securities, you should carefully read the entire base prospectus, this prospectus supplement and any related free writing prospectus, including the information under the caption "Risk Factors" included therein and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the other information incorporated by reference into this prospectus, including our financial statements and the related notes, and the exhibits to the registration statement of which this prospectus is a part.*

### **Our Company**

We are a biopharmaceutical company focused on the development and commercialization of therapeutics for the treatment of rare genetic disorders that result in severe, life-threatening metabolic disorders. Our lead peptide product candidate is setmelanotide, a potent, first-in-class melanocortin-4 receptor, or MC4R, agonist for the treatment of rare genetic disorders of obesity. We believe setmelanotide, for which we have exclusive worldwide rights, has the potential to serve as replacement therapy for the treatment of melanocortin-4, or MC4, pathway deficiencies. MC4 pathway deficiencies result in the disruption of satiety signals and energy homeostasis in the body, which, in turn, leads to intense feelings of hunger and to obesity. Our development efforts are initially focused on obesity related to six single gene-related, or monogenic, MC4 pathway deficiencies, pro-opiomelanocortin, or POMC, leptin receptor, or LepR, Bardet-Biedl syndrome, Alström syndrome, POMC heterozygous and POMC epigenetic disorders for which there are currently no effective or approved treatments. We believe that the MC4 pathway is a compelling target for treating these genetic disorders because of its critical role in regulating appetite and weight by promoting satiety and weight control, and that peptide therapeutics are uniquely suited for activating this target.

We have demonstrated proof of concept in Phase 2 clinical trials in POMC deficiency obesity, LepR deficiency obesity, Bardet-Biedl syndrome and Alström syndrome, four genetic disorders of extreme and unrelenting appetite and obesity, in which setmelanotide dramatically reduced both weight and hunger. The U.S. Food and Drug Administration, or the FDA, has acknowledged the importance of these results by giving setmelanotide Breakthrough Therapy designation for the treatment of obesity associated with genetic defects upstream of the MC4 receptor in the leptin melanocortin pathways. The Breakthrough Therapy designation currently covers indications for: POMC deficiency obesity, LepR deficiency obesity, Bardet-Biedl syndrome and Alström Syndrome. Setmelanotide is currently in Phase 3 development for POMC deficiency obesity and LepR deficiency obesity, and we are initiating a combined Phase 3 trial for Bardet-Biedl and Alström syndrome. We have completed enrollment in the pivotal cohorts for both our POMC deficiency obesity Phase 3 clinical trial and our LepR deficiency obesity Phase 3 clinical trial. We expect to report initial Phase 3 data from these trials in the third quarter of 2019, and subsequently plan to file for regulatory approval for these two indications concurrently. We believe that we have demonstrated proof of concept in our Phase 2 clinical trial in Bardet-Biedl syndrome and Alström syndrome, and met with the FDA in May 2018 to discuss a combined pivotal Phase 3 clinical trial in these indications. Based on these preliminary discussions with the FDA, we currently plan to initiate this trial and enroll patients in 2018. We have an ongoing Phase 2 clinical trial in POMC heterozygous deficiency obesity and POMC epigenetic disorders. We reported initial, preliminary results in these additional Phase 2 indications in June 2018, and plan to provide a further update for these indications early in 2019. In total, approximately 300 obese subjects and patients have been treated

with setmelanotide in previous and ongoing clinical trials in which setmelanotide demonstrated statistically significant weight loss with good tolerability.

We are a Delaware corporation organized in February 2013 under the name Rhythm Metabolic, Inc. and as of October 2015, under the name Rhythm Pharmaceuticals, Inc. Our principal executive offices are located at 500 Boylston Street, 11th Floor, Boston, MA 02116, and our telephone number is (857) 264-4280. Our corporate website address is [www.rhythmtx.com](http://www.rhythmtx.com). Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

## THE OFFERING

|  |   |
|--|---|
| Common stock offered by us                         | Shares of our common stock having an aggregate offering price of up to \$100,000,000.   |
| Common stock to be outstanding after this offering | Up to 3,190,810 shares, assuming sales at a price of \$31.34 per share, which was the closing price of our common stock on the Nasdaq Global Market on November 8, 2018. The actual number of shares issued will vary depending on the price at which shares may be sold from time to time under this offering.   |
| Manner of offering                                 | "At the market offering" that may be made from time to time through our sales agent, Cowen and Company, LLC. See "Plan of Distribution" beginning on page S-13.   |
| Use of proceeds                                    | <p>We estimate that the net proceeds from the sale of the shares of common stock that we are offering may be up to approximately \$96.8 million, after deducting Cowen's estimated discounts and commissions and estimated offering expenses payable by us. The amount of the proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold.</p> <p>We currently intend to use the net proceeds from this offering primarily for general corporate purposes, which may include funding research and development of our product candidates, expanding our manufacturing capabilities, increasing our working capital, acquisitions or investments in businesses, products or technologies that are complementary to our own and capital expenditures.</p> <p>We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds. See "Use of Proceeds" on page S-10.</p> |
| Risk factors                                       | Investing in our common stock involves a high degree of risk. You should carefully read and consider the information set forth under the heading "Risk Factors" beginning on page S-6 and the other information included in, or incorporated by reference into, this prospectus for a discussion of certain factors you should carefully consider before deciding to invest in shares of our common stock.  |
| NASDAQ Global Market symbol                        | "RYTM"  |

The number of shares of our common stock to be outstanding after this offering is based on 34,382,525 shares of our common stock outstanding as of September 30, 2018 and excludes:

- § 28,200 shares of common stock issued upon the exercise of stock options after September 30, 2018 at a weighted average exercise price of \$6.18 per share;
- § 2,346,578 shares of common stock reserved for future issuance under our 2017 equity incentive plan, or the 2017 Plan, as of September 30, 2018;
- § 272,841 shares of common stock reserved for future issuance under our 2017 employee stock purchase plan, as of September 30, 2018; and
- § 2,474,790 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2018 under the 2017 Plan at a weighted average exercise price of \$15.84.

## RISK FACTORS

*An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should consider carefully the risks described below and discussed under the sections captioned "Risk Factors" contained in our most recent Annual Report on Form 10-K, as well as in any of our subsequent Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K, which are incorporated by reference herein in their entirety, together with other information in this prospectus, the information and documents incorporated by reference in this prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.*

*Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose part or all of your investment. This prospectus and the incorporated documents also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned below. Forward-looking statements included in this prospectus are based on information available to us on the date hereof, and all forward-looking statements in documents incorporated by reference are based on information available to us as of the date of such documents. We disclaim any intent to update any forward-looking statements.*

### Risks Related to This Offering

***Management will have broad discretion as to the use of the proceeds from this offering and may not use the proceeds effectively.***

Because we have not designated the amount of net proceeds from this offering to be used for any particular purpose, our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of the offering. Our management may use the net proceeds for corporate purposes that may not improve our financial condition or market value.

***If you purchase shares of common stock in this offering, you will suffer immediate dilution of your investment.***

The shares sold in this offering, if any, will be sold from time to time at various prices. However, the expected offering price of our common stock will be substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. Assuming that an aggregate of 3,190,810 shares of our common stock are sold at a price of \$31.34 per share pursuant to this prospectus, which was the last reported sale price of our common stock on the Nasdaq Global Market on November 8, 2018, for aggregate gross proceeds of approximately \$100 million, after deducting Cowen's estimated discounts and commissions and estimated aggregate offering expenses payable by us, you will experience immediate dilution of \$21.59 per share, representing the difference between our as adjusted net tangible book value per share after giving effect to this offering and the assumed offering price of \$31.34 per share. To the extent outstanding options are exercised, you will incur further dilution.

***Future sales or issuances of our common stock in the public markets, or the perception of such sales, could depress the trading price of our common stock.***

The sale of a substantial number of shares of our common stock or other equity-related securities in the public markets, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We may sell large quantities of our common stock at any time pursuant to this prospectus supplement or one or more separate offerings. We cannot predict the effect that future sales of common stock or other equity-related securities would have on the market price of our common stock.

***The actual number of shares we will issue under the sales agreement, at any one time or in total, is uncertain.***

Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a placement notice to Cowen at any time throughout the term of the sales agreement. The number of shares that are sold by Cowen after delivering a placement notice will fluctuate based on the market price of our common stock during the sales period and limits we set with Cowen. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

***The common stock offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.***

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the information incorporated by reference into this prospectus, contains, and any prospectus supplement 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, or the Exchange Act. You can identify these forward-looking statements by the use of words such as "outlook," "believes," "expects," "potential," "continues," "may," "will," "should," "seeks," "approximately," "predicts," "intends," "plans," "estimates," "anticipates" or the negative version of these words or other comparable words. These statements relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. We believe these factors include:

- § the success, cost and timing of our product development activities and clinical trials;
- § our ability to obtain and maintain regulatory approval for setmelanotide and our future product candidates, if any, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- § our ability to obtain funding for our operations;
- § the commercialization of setmelanotide, if approved;
- § the number of people in our target patient population;
- § our plans to research, develop and commercialize setmelanotide;
- § our ability to operate, and the implementation of our business strategy, as an independent company;
- § our ability to attract collaborators with development, regulatory and commercialization expertise;
- § our expectations regarding our ability to obtain and maintain intellectual property protection for setmelanotide;
- § future agreements with third parties in connection with the commercialization of setmelanotide or our future product candidates, if any;
- § the size and growth potential of the markets for setmelanotide, and our ability to serve those markets;
- § our expectations for the pricing of setmelanotide;
- § the rate and degree of market acceptance of setmelanotide, as well as the reimbursement coverage for setmelanotide;
- § regulatory developments in the United States, the European Union and other jurisdictions;
- § the performance of our third-party suppliers and manufacturers;
- § the extent and success of competing therapies that are or may become available;
- § our ability to attract and retain key scientific or management personnel;
- § the accuracy of our estimates regarding our target patient populations, expenses, future revenues, capital requirements and needs for additional financing;
- § our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act; and
- § our use of the proceeds from this offering.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important cautionary statements in this prospectus or in the documents incorporated by reference in this prospectus, particularly in the



"Risk Factors" section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. For a summary of such factors, please refer to the section entitled "Risk Factors" in this prospectus, as updated and supplemented by the discussion of risks and uncertainties under "Risk Factors" contained in any supplements to this prospectus and in our most recent annual report on Form 10-K, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference. The information contained in this document is believed to be current as of the date of this document. We do not intend to update any of the forward-looking statements after the date of this document to conform these statements to actual results or to changes in our expectations, except as required by law.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus or in any document incorporated herein by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus or the date of the document incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

## **USE OF PROCEEDS**

We may offer and sell shares of our common stock having aggregate sales proceeds of up to \$100 million from time to time pursuant to this sales agreement prospectus. 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 estimate that the net proceeds from the sale of the shares of common stock that we are offering may be up to approximately \$96.8 million, after deducting Cowen's estimated discounts and commissions and estimated offering expenses payable by us. The amount of the proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement with Cowen as a source of financing.

We currently intend to use the net proceeds from this offering primarily for general corporate purposes, which may include funding research and development of our product candidates, expanding our manufacturing capabilities, increasing our working capital, acquisitions or investments in businesses, products or technologies that are complementary to our own and capital expenditures. Pending the application of the net proceeds, we intend to invest the net proceeds in short-term or long-term, investment-grade, interest-bearing securities. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

## **DIVIDEND POLICY**

We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

## DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share and the as adjusted net tangible book value per share of our common stock after this offering.

Our historical net tangible book value as of September 30, 2018 was approximately \$269.6 million, or \$7.84 per share. Our historical net tangible book value represents our total tangible assets less our total liabilities. Net historical tangible book value per share is our historical net tangible book value divided by the number of shares of common stock outstanding as of September 30, 2018.

After giving effect to the assumed sale of 3,190,810 shares of our common stock in this offering at an assumed offering price of \$31.34 per share, the last reported sale price of our common stock on the Nasdaq Global Market on November 8, 2018, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2018 would have been approximately \$366.4 million, or \$9.75 per share. This represents an immediate increase in net tangible book value of \$1.91 per share to existing stockholders. Investors purchasing our common stock in this offering will have paid \$21.59 more than the as adjusted net tangible book value per share after this offering. The following table illustrates this on a per share basis:

|   |                 |
|---|-----------------|
| Assumed offering price per share  | \$ 31.34        |
| Historical net tangible book value per share as of September 30, 2018                                   | \$ 7.84         |
| Increase per share attributable to new investors  | <u>1.91</u>     |
| As adjusted net tangible book value per share at September 30, 2018 after giving effect to the offering | <u>9.75</u>     |
| Dilution per share to new investors   | <u>\$ 21.59</u> |

The table above assumes for illustrative purposes that an aggregate of 3,190,810 shares of our common stock are sold during the term of the sales agreement with Cowen at a price of \$31.34 per share, the last reported sale price of our common stock on the Nasdaq Global Market on November 8, 2018, for aggregate gross proceeds of \$100 million. The shares subject to the sales agreement with Cowen are being sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$31.34 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$100 million during the term of the sales agreement with Cowen is sold at that price, would increase our adjusted net tangible book value per share after the offering to \$9.78 per share and would increase the difference in net tangible book value per share to new investors in this offering to \$22.56 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$31.34 per share shown in the table above, assuming all of our common stock in the amount of \$100 million during the term of the sales agreement with Cowen is sold at that price, would decrease our adjusted net tangible book value per share after the offering to \$9.73 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to \$20.61 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only and may differ based on the actual offering price and the actual number of shares offered.

The foregoing table and calculations are based on the 34,382,525 shares of our common stock outstanding as of September 30, 2018, and excludes:

- § 28,200 shares of common stock issued upon the exercise of stock options after September 30, 2018 at a weighted average exercise price of \$6.18 per share;
- § 2,346,578 shares of common stock reserved for future issuance under the 2017 Plan, as of September 30, 2018;
- § 272,841 shares of common stock reserved for future issuance under our 2017 employee stock purchase plan, as of September 30, 2018; and
- § 2,474,790 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2018 under the 2017 Plan at a weighted average exercise price of \$15.84.

To the extent that any options are exercised, new options or other securities are issued under our equity incentive plans, or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of such securities could result in further dilution to our stockholders.

## PLAN OF DISTRIBUTION

We have entered into a sales agreement with Cowen, under which we may issue and sell from time to time up to \$100 million of our common stock through Cowen as our sales agent. Sales of our common stock, if any, will be made at market prices by any method that is deemed to be an "at the market" offering as defined in Rule 415 under the Securities Act, including sales made directly on the Nasdaq Global Market or any other trading market for our common stock. If authorized by us in writing, Cowen may purchase shares of our common stock as principal.

Cowen will offer our common stock subject to the terms and conditions of the sales agreement on a daily basis or as otherwise agreed upon by us and Cowen. We will designate the maximum amount of common stock to be sold through Cowen on a daily basis or otherwise determine such maximum amount together with Cowen. Subject to the terms and conditions of the sales agreement, Cowen will use its commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us. We may instruct Cowen not to sell common stock if the sales cannot be effected at or above the price designated by us in any such instruction. Cowen or we may suspend the offering of our common stock being made through Cowen under the sales agreement upon proper notice to the other party. Cowen and we each have the right, by giving written notice as specified in the sales agreement, to terminate the sales agreement in each party's sole discretion at any time.

The aggregate compensation payable to Cowen as sales agent equals up to 3% of the gross sales price of the shares sold through it pursuant to the sales agreement. We estimate that the total expenses of the offering payable by us, excluding commissions payable to Cowen under the sales agreement, will be approximately \$200,000.

The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such common stock.

Cowen will provide written confirmation to us following the close of trading on the Nasdaq Global Market on each day in which common stock is sold through it as sales agent under the sales agreement. Each confirmation will include the number of shares of common stock sold through it as sales agent on that day, the volume weighted average price of the shares sold, the percentage of the daily trading volume and the net proceeds to us.

We will report at least quarterly the number of shares of common stock sold through Cowen under the sales agreement and the net proceeds to us.

Settlement for sales of common stock will occur, unless the parties agree otherwise, on the second business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sales of our common stock on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation paid to Cowen may be deemed to be underwriting commissions or discounts. We have agreed in the sales agreement to provide indemnification and contribution to Cowen against certain liabilities, including liabilities under the Securities Act. In addition, we have agreed, under certain circumstances, to reimburse a portion

of the expenses of Cowen in connection with the offering up to a maximum of \$60,000. As sales agent, Cowen will not engage in any transactions that stabilizes our common stock.

Our common stock is listed on the Nasdaq Global Market and trades under the symbol "RYTM." The transfer agent of our common stock is Computershare Trust Company, N.A.

Cowen and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received and, may in the future receive, customary fees.

## **LEGAL MATTERS**

Certain legal matters in connection with the shares of common stock offered hereby will be passed upon for us by Morgan, Lewis & Bockius LLP, Boston, Massachusetts. Cowen and Company, LLC is being represented by Ropes & Gray LLP, Boston, Massachusetts, in connection with this offering.

## **EXPERTS**

The consolidated financial statements of Rhythm Pharmaceuticals, Inc. appearing in Rhythm Pharmaceutical's Current Report on Form 8-K dated November 9, 2018 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the report of Ernst & Young LLP pertaining to such financial statements to the extent covered by consents filed with the Securities and Exchange Commission given on the authority of such firm as experts in accounting and auditing.

## **WHERE YOU CAN FIND MORE INFORMATION**

We are subject to the information requirements of the Exchange Act, and in accordance with the Exchange Act, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet ([www.sec.gov](http://www.sec.gov)). Our corporate website address is [www.rhythmtx.com](http://www.rhythmtx.com). Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information contained in documents that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC before the date of this prospectus, while information that we file later with the SEC will automatically update and supersede prior information. Any information so updated and superseded shall not be deemed, except as so updated and superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of the offering. Notwithstanding the foregoing, unless specifically stated to the contrary, none of the information that is not deemed "filed" with the SEC, including information furnished under Items 2.02 or 7.01 of any Current Report on Form 8-K, will be incorporated by reference into, or otherwise included in, this prospectus:

1. our annual report on Form 10-K for the fiscal year ended December 31, 2017 filed with the SEC on March 12, 2018 (the "Form 10-K");
2. the information contained in our definitive proxy statement on Schedule 14A for our 2018 annual meeting of stockholders filed with the SEC on April 30, 2018, to the extent incorporated by reference in Part III of the Form 10-K;
3. our quarterly reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, filed with the SEC on May 14, 2018, August 8, 2018 and November 9, 2018, respectively;
4. our current reports on Form 8-K filed with the SEC on March 12, 2018 (not including any information furnished under Item 2.02 or 9.01 of such Form 8-K or any other information that is identified as "furnished" rather than filed, which information is not incorporated by reference herein), April 2, 2018, June 11, 2018, August 9, 2018 and November 9, 2018; and
5. our description of our common stock contained in the registration statement on Form 8-A, filed on September 29, 2017, and all amendments and reports updating such description.

We make available, free of charge, through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may also obtain, free of charge, a copy of any of these documents (other than exhibits to these documents unless the exhibits are specifically incorporated by reference into these documents or referred to in this prospectus) by writing or calling us at the following address and telephone number:

Rhythm Pharmaceuticals, Inc.  
500 Boylston Street  
11th Floor  
Boston, Massachusetts 02116  
(857) 264-4280

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.



**\$100,000,000**



**Rhythm Pharmaceuticals, Inc.**

**Common Stock**

**PROSPECTUS**

**Cowen**

November 9, 2018

---

---

**PART II. INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution.**

The expenses in connection with the issuance and distribution of the securities being registered will be borne by us and are set forth in the following table. All amounts except the registration fee are estimated.

|                              |    |            |
|------------------------------|----|------------|
| SEC registration fee         | \$ | 12,120(1)  |
| FINRA filing fee             |    | 225,500    |
| Legal fees and expenses      |    | (2)        |
| Accounting fees and expenses |    | (2)        |
| Printing expenses            |    | (2)        |
| Transfer and registrar fee   |    | (2)        |
| Miscellaneous                |    | (2)        |
| Total                        | \$ | <u>(2)</u> |

- (1) Represents registration fee applicable to amount included in prospectus for \$100 million of common stock. Additional registration fees deferred in reliance upon Rules 456(b) and 457(r) under the Securities and Exchange Act of 1934, as amended.
- (2) These fees will be dependent on the type of securities offered and the number of offerings and, therefore, cannot be estimated at this time. The applicable prospectus supplement will set forth the estimated amount of expenses of any offerings of securities.

**Item 15. Indemnification of Directors and Officers.**

Section 145 of the Delaware General Corporation Law authorizes a corporation's board of directors to grant, and authorizes a court to award, indemnity to officers, directors, and other corporate agents.

As permitted by Delaware law, our amended and restated certificate of incorporation provides that, to the fullest extent permitted by Delaware law, no director will be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director. Pursuant to Delaware law such protection would be not available for liability:

- § for any breach of a duty of loyalty to us or our stockholders;
- § for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- § for any transaction from which the director derived an improper benefit; or
- § for an act or omission for which the liability of a director is expressly provided by an applicable statute, including unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law.

Our amended and restated certificate of incorporation also provides that if Delaware law is amended after the approval by our stockholders of the amended and restated certificate of incorporation to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law.

Our amended and restated bylaws further provide that we must indemnify our directors and officers to the fullest extent permitted by Delaware law. Our amended and restated bylaws also authorize us to indemnify any of our employees or agents and permit us to secure insurance on behalf of any officer, director, employee or agent for any liability arising out of his or her action in that capacity, whether or not Delaware law would otherwise permit indemnification.

In addition, our amended and restated bylaws also provide that we are required to advance expenses to our directors and officers as incurred in connection with legal proceedings against them for which they may be indemnified and that the rights conferred in the amended and restated bylaws are not exclusive.

We have entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us to indemnify each director and officer to the fullest extent permitted by Delaware law, the amended and restated certificate of incorporation and amended and restated bylaws, for expenses such as, among other things, attorneys' fees, judgments, fines, and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action by or in our right, arising out of the person's services as our director or executive officer or as the director or executive officer of any subsidiary of ours or any other company or enterprise to which the person provides services at our request. We also have directors' and officers' liability insurance.

The SEC has taken the position that personal liability of directors for violation of the federal securities laws cannot be limited and that indemnification by us for any such violation is unenforceable. The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

## Item 16. Exhibits.

| Exhibit Number | Exhibit Description   | Incorporated by Reference |           |        |
|----------------|---|---------------------------|-----------|--------|
|                |   | Form                      | Date      | Number |
| 1.1*           | Form of Underwriting Agreement.   |                           |           |        |
| 1.2            | <a href="#">Sales Agreement, dated as of November 9, 2018, by and between the registrant and Cowen and Company, LLC.</a>            |                           |           |        |
| 3.1            | <a href="#">Amended and Restated Certificate of Incorporation.</a>  | S-1/A                     | 9/25/2017 | 3.3    |
| 3.2            | <a href="#">Amended and Restated Bylaws.</a>  | S-1/A                     | 9/25/2017 | 3.5    |
| 4.1            | <a href="#">Form of Common Stock Certificate.</a>   | S-1/A                     | 9/25/2017 | 4.1    |
| 4.2            | <a href="#">Amended and Restated Investors' Rights Agreement, dated August 21, 2017.</a>  | S-1                       | 9/5/2017  | 4.2    |
| 4.3            | <a href="#">Form of Subordinated Indenture to be entered into between the registrant and a trustee acceptable to the registrant</a> |                           |           |        |
| 4.4            | <a href="#">Form of Senior Indenture to be entered into between the registrant and a trustee acceptable to the registrant</a>       |                           |           |        |
| 4.5            | <a href="#">Form of Subordinated Note (included in Exhibit 4.3 hereto).</a>   |                           |           |        |
| 4.6            | <a href="#">Form of Senior Note (included in Exhibit 4.4 hereto).</a>   |                           |           |        |
| 4.7*           | Form of Warrant Agreement.  |                           |           |        |
| 4.8*           | Form of Warrant Certificate.  |                           |           |        |
| 4.9*           | Form of Certificate of Designations.  |                           |           |        |
| 4.10*          | Form of Preferred Stock Certificate.  |                           |           |        |
| 4.11*          | Form of Unit Agreement  |                           |           |        |
| 5.1            | <a href="#">Opinion of Morgan, Lewis &amp; Bockius LLP</a>  |                           |           |        |
| 23.1           | <a href="#">Consent of Ernst &amp; Young LLP, Independent Registered Public Accounting Firm.</a>                                    |                           |           |        |
| 23.2           | <a href="#">Consent of Morgan, Lewis &amp; Bockius LLP. (included in its Opinion filed as Exhibit 5.1 hereto).</a>                  |                           |           |        |
| 24.1           | <a href="#">Powers of Attorney (included on signature page).</a>  |                           |           |        |
| 25.1**         | Statement of Eligibility of Trustee on Form T-1 for Senior Indenture under Trust Indenture Act of 1939.                             |                           |           |        |
| 25.2**         | Statement of Eligibility of Trustee on Form T-1 for Subordinated Indenture under Trust Indenture Act of 1939.                       |                           |           |        |

\* To be filed by amendment or as an exhibit to a document filed under the Securities Exchange Act of 1934, as amended, and incorporated by reference herein.

\*\* To be filed separately pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939, as amended, and the appropriate rules and regulations thereunder.

**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 Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% 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 (1)(i), (1)(ii) and (1)(iii) of this section 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 Securities and Exchange 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) 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
  - (ii) 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.

- (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 Section 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) That, for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.
- (8) That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.
- (9) If and when applicable, 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 in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under Section 305(b)2 of the Trust Indenture 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 Securities and Exchange

Commission 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;





| <u>Name</u>   | <u>Title</u>                    | <u>Date</u>      |
|---|---------------------------------|------------------|
| <u>/s/ TODD FOLEY</u><br>Todd Foley                 | Director                        | November 9, 2018 |
| <u>/s/ CHRISTOPHE R. JEAN</u><br>Christophe R. Jean | Director                        | November 9, 2018 |
| <u>/s/ ED MATHERS</u><br>Ed Mathers                 | Director                        | November 9, 2018 |
| <u>/s/ DAVID W. J. MCGIRR</u><br>David W. J. McGirr | Director                        | November 9, 2018 |
| <u>/s/ DAVID P. MEEKER</u><br>David P. Meeker       | Director, Chairman of the Board | November 9, 2018 |



RHYTHM PHARMACEUTICALS, INC.  
\$100,000,000  
COMMON STOCK

SALES AGREEMENT

November 9, 2018

Cowen and Company, LLC  
599 Lexington Avenue  
New York, NY 10022

Ladies and Gentlemen:

Rhythm Pharmaceuticals, Inc., a Delaware Corporation (the "**Company**"), confirms its agreement (this "**Agreement**") with Cowen and Company, LLC ("**Cowen**"), as follows:

1. **Issuance and Sale of Shares.** The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell through Cowen, acting as agent and/or principal, shares (the "**Placement Shares**") of the Company's common stock, par value \$0.001 per share (the "**Common Stock**"), having an aggregate offering price of up to \$100,000,000. Notwithstanding anything to the contrary contained herein, the parties hereto agree that compliance with the limitation set forth in this **Section 1** on the number of shares of Common Stock issued and sold under this Agreement shall be the sole responsibility of the Company, and Cowen shall have no obligation in connection with such compliance. The issuance and sale of Common Stock through Cowen will be effected pursuant to the Registration Statement (as defined below) being filed by the Company and after such Registration Statement has been declared effective by the Securities and Exchange Commission (the "**Commission**"), although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement (as defined below) to issue the Common Stock.

As of the date of this Agreement, the Company has filed or will file, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "**Securities Act**"), with the Commission a registration statement on Form S-3, including a base prospectus, relating to certain securities, including the Common Stock, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "**Exchange Act**"). The Company has prepared a prospectus supplement specifically relating to the Placement Shares (the "**Prospectus Supplement**") to the base prospectus included as part of such registration statement. The Company will furnish to Cowen, for use by Cowen, copies of the prospectus included as part of such registration statement, as supplemented by the Prospectus Supplement, relating to the Placement Shares. Except where the context otherwise requires, such registration statement, as amended when it became effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B or 462(b) of the Securities Act, is herein called the "**Registration Statement**." The base prospectus, including all documents incorporated therein by reference, included in the Registration Statement, as it may be supplemented by the Prospectus Supplement, in the form in which such prospectus and/or Prospectus Supplement have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act, together with

---

any “issuer free writing prospectus,” as defined in Rule 433 of the Securities Act regulations (“**Rule 433**”), relating to the Placement Shares that (i) is required to be filed with the Commission by the Company or (ii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g), is herein called the “**Prospectus**.” Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement thereto shall be deemed to include any copy filed with the Commission pursuant to the Electronic Data Gathering Analysis and Retrieval System (“**EDGAR**”).

2. **Placements.** Each time that the Company wishes to issue and sell the Placement Shares hereunder (each, a “**Placement**”), it will notify Cowen by email notice (or other method mutually agreed to in writing by the parties) (a “**Placement Notice**”) containing the parameters in accordance with which it desires the Placement Shares to be sold, which shall at a minimum include the number of Placement Shares to be issued, the time period during which sales are requested to be made, any limitation on the number of Placement Shares that may be sold in any one Trading Day (as defined in Section 3) and any minimum price below which sales may not be made, a form of which containing such minimum sales parameters necessary is attached hereto as **Schedule 1**. The Placement Notice shall originate from any of the individuals from the Company set forth on **Schedule 2** (with a copy to each of the other individuals from the Company listed on such schedule), and shall be addressed to each of the individuals from Cowen set forth on **Schedule 2**, as such **Schedule 2** may be amended from time to time. The Placement Notice shall be effective upon receipt by Cowen unless and until (i) in accordance with the notice requirements set forth in Section 4, Cowen declines to accept the terms contained therein for any reason, in its sole discretion, (ii) the entire amount of the Placement Shares have been sold, (iii) in accordance with the notice requirements set forth in Section 4, the Company suspends or terminates the Placement Notice for any reason in its sole discretion, (iv) the Company issues a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice, or (v) this Agreement has been terminated under the provisions of **Section 11**. The amount of any discount, commission or other compensation to be paid by the Company to Cowen in connection with the sale of the Placement Shares shall be calculated in accordance with the terms set forth in **Schedule 3**. It is expressly acknowledged and agreed that neither the Company nor Cowen will have any obligation whatsoever with respect to a Placement or any Placement Shares unless and until the Company delivers a Placement Notice to Cowen and Cowen does not decline such Placement Notice pursuant to the terms set forth above, and then only upon the terms specified therein and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice, the terms of the Placement Notice will control.

3. **Sale of Placement Shares by Cowen.** Subject to the terms and conditions herein set forth, upon the Company’s delivery of a Placement Notice, and unless the sale of the Placement Shares described therein has been declined, suspended, or otherwise terminated in accordance with the terms of this Agreement, Cowen, for the period specified in the Placement Notice, will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the Nasdaq Global Market (“**Nasdaq**”) to sell such Placement Shares up to the amount specified in such Placement Notice, and otherwise in accordance with the terms of such Placement Notice. Cowen will provide written confirmation to the Company (including by email correspondence to each of the individuals of the Company set forth on Schedule 2, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) no later than the opening of the Trading Day (as defined below) immediately following the Trading Day on which it has

made sales of Placement Shares hereunder setting forth the number of Placement Shares sold on such day, the volume-weighted average price of the Placement Shares sold, and the Net Proceeds (as defined below) payable to the Company. Cowen may sell Placement Shares by any method permitted by law deemed to be an “at the market” offering as defined in Rule 415(a)(4) of the Securities Act, including without limitation sales made through Nasdaq or on any other existing trading market for the Common Stock. Cowen shall not purchase Placement Shares for its own account as principal unless expressly authorized to do so by the Company in a Placement Notice. The Company acknowledges and agrees that (i) there can be no assurance that Cowen will be successful in selling Placement Shares, and (ii) Cowen will incur no liability or obligation to the Company or any other person or entity if it does not sell Placement Shares for any reason other than a failure by Cowen to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such Placement Shares as required under this Section 3. For the purposes hereof, “**Trading Day**” means any day on which the Company’s Common Stock is purchased and sold on the principal market on which the Common Stock is listed or quoted.

4. Suspension of Sales.

(a) The Company or Cowen may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on Schedule 2, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on Schedule 2), suspend any sale of Placement Shares; *provided, however*, that such suspension shall not affect or impair either party’s obligations with respect to any Placement Shares sold hereunder prior to the receipt of such notice. Each of the parties agrees that no such notice under this Section 4 shall be effective against the other unless it is made to one of the individuals named on Schedule 2 hereto, as such schedule may be amended in writing from time to time.

(b) Notwithstanding any other provision of this Agreement, during any period in which the Company is in possession of material non-public information, the Company and Cowen agree that (i) no sale of Placement Shares will take place, (ii) the Company shall not request the sale of any Placement Shares, and (iii) Cowen shall not be obligated to sell or offer to sell any Placement Shares.

(c) If either Cowen or the Company has reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied with respect to the Common Stock, it shall promptly notify the other party, and Cowen may, at its sole discretion, suspend sales of the Placement Shares under this Agreement.

(d) The Registration Statement became effective upon filing on November 9, 2018. Notwithstanding any other provision of this Agreement, during any period in which the Registration Statement is no longer effective under the Securities Act, the Company shall promptly notify Cowen, the Company shall not request the sale of any Placement Shares, and Cowen shall not be obligated to sell or offer to sell any Placement Shares.

5. Settlement.

(a) Settlement of Placement Shares. Unless otherwise specified in the applicable Placement Notice, settlement for sales of Placement Shares will occur on the second (2<sup>nd</sup>) Trading Day (or such earlier day as is industry practice for regular-way trading) following the date on which such sales are made (each, a “Settlement Date” and the first such settlement date, the “First Delivery Date”). The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Placement Shares sold (the “Net Proceeds”) will be equal to the aggregate sales price received by Cowen at which such Placement Shares

were sold, after deduction for (i) Cowen's commission, discount or other compensation for such sales payable by the Company pursuant to Section 2 hereof, (ii) any other amounts due and payable by the Company to Cowen hereunder pursuant to Section 7(g) (Expenses) hereof, and (iii) any transaction fees imposed by any governmental or self-regulatory organization in respect of such sales.

(b) Delivery of Placement Shares. On or before each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Placement Shares being sold by crediting Cowen's or its designee's account (provided Cowen shall have given the Company written notice of such designee at least one Trading Day prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System ("DWAC") or by such other means of delivery as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradeable, transferable, registered shares in good deliverable form. On each Settlement Date, Cowen will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. Cowen will be responsible for providing DWAC instructions or instructions by other means with regard to the transfer of the Placement Shares being sold. The Company agrees that if the Company, or its transfer agent (if applicable), defaults in its obligation to deliver duly authorized Placement Shares on a Settlement Date through no fault of Cowen, the Company agrees that in addition to and in no way limiting the rights and obligations set forth in Section 9(a) (Indemnification and Contribution) hereto, it will (i) hold Cowen harmless against any loss, claim, damage, or reasonable and documented expense (including reasonable legal fees and expenses), as incurred, arising out of or in connection with such default by the Company and (ii) pay to Cowen (without duplication) any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

6. Representations and Warranties of the Company. Except as disclosed in the Registration Statement or the Prospectus, the Company represents and warrants to, and agrees with, Cowen that, unless such representation, warranty or agreement specifies a different time, as of the date of this Agreement, each Representation Date (as defined in Section 7(m)), each date on which a Placement Notice is given, and any date on which Placement Shares are sold hereunder:

(a) Compliance with Registration Requirements. Upon the filing of the Registration Statement the Company qualified as a "well-known seasoned issuer" as defined in Rule 405 of the Securities Act. Prior to the delivery of any Placement Notice by the Company, the Registration Statement will have become effective automatically upon filing with the Commission; no stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the best knowledge of the Company, contemplated or threatened by the Commission. The Company meets the requirements for use of Form S-3 under the Securities Act. The sale of the Placement Shares hereunder meets the requirements of General Instruction I.B.1 of Form S-3.

(b) No Misstatement or Omission. The Prospectus when filed complied and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act. Each of the Registration Statement, any Rule 462(b) Registration Statement, the Prospectus and any post-effective amendments or supplements thereto, at the time it became effective or its date, as applicable, complied and as of each of the Settlement Dates, if any, complied in all material respects with the Securities Act and did not and, as of each Settlement Date, if any, did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus, as amended or supplemented, as of its date, did not and, as of each of the Settlement Dates, if any, will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the two immediately preceding sentences do not apply to statements in or omissions from the Registration Statement, any Rule 462(b)

Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with information relating to Cowen furnished to the Company in writing by Cowen expressly for use therein. There are no contracts or other documents required to be described in the Prospectus or to be filed as exhibits to the Registration Statement which have not been described or filed as required.

(c) Offering Materials Furnished to Cowen. The Company has delivered to Cowen one complete copy of the Registration Statement and a copy of each consent and certificate of experts filed as a part thereof, and conformed copies of the Registration Statement (without exhibits) and the Prospectus, as amended or supplemented, in such quantities and at such places as Cowen has reasonably requested.

(d) Emerging Growth Company. The Company is an “emerging growth company,” as defined in Section 2(a) of the Securities Act. The Company agrees to notify Cowen promptly upon the Company ceasing to be an emerging growth company.

(e) Not an Ineligible Issuer. The Company currently is not an “ineligible issuer,” as defined in Rule 405 of the rules and regulation of the Commission. The Company agrees to notify Cowen promptly upon the Company becoming an “ineligible issuer.”

(f) Distribution of Offering Material By the Company. The Company has not distributed and will not distribute, prior to the completion of Cowen’s distribution of the Placement Shares pursuant to this Agreement, any offering material in connection with the offering and sale of the Placement Shares other than the Prospectus or the Registration Statement.

(g) The Sales Agreement. This Agreement has been duly authorized, executed and delivered by, and is a valid and binding agreement of, the Company, enforceable in accordance with its terms, except as rights to indemnification hereunder may be limited by applicable law and except as the enforcement hereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles.

(h) Authorization of the Common Stock. The Placement Shares, when issued, delivered and paid for in accordance with this Agreement will be validly issued, fully paid and nonassessable, and such Placement Shares, when issued and delivered in accordance with this Agreement, will be free of preemptive rights or other rights of any securityholder of the Company.

(i) No Applicable Registration or Other Similar Rights. There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly waived.

(j) Material Adverse Change. There has not occurred, individually or in the aggregate, any material adverse change, or any development involving a prospective material adverse change, in the condition (financial or otherwise), prospects, earnings, business or operations of the Company from that set forth in the Registration Statement or Prospectus (any such change is called a “**Material Adverse Change**”).

(k) Independent Accountants. Ernst & Young LLP, who have certified certain financial statements of the Company and delivered their report with respect to the audited financial statements and schedules included in or incorporated by reference in the Registration Statement and Prospectus, are independent public accountants with respect to the Company within the meaning of the Securities Act and the applicable published rules and regulations thereunder.

(l) Preparation of the Financial Statements. The consolidated historical financial statements and schedules of the Company filed with the Commission as a part of or incorporated by reference in the Registration Statement and included in the Prospectus present fairly in all material respects the financial condition, results of operations and cash flows of the Company as of the dates and for the periods indicated, comply as to form in all material respects with the applicable accounting requirements of the Securities Act and have been prepared in conformity with generally accepted accounting principles applied on a consistent basis throughout the periods involved (except as otherwise noted therein). The selected financial data set forth or incorporated in the Registration Statement and included in the Prospectus fairly present, on the basis stated in the Prospectus and the Registration Statement, the information included therein. The pro forma financial statements included in the Prospectus and the Registration Statement include assumptions that provide a reasonable basis for presenting the significant effects directly attributable to the transactions and events described therein, the related pro forma adjustments give appropriate effect to those assumptions, and the pro forma adjustments reflect the proper application of those adjustments to the historical financial statement amounts in the pro forma financial statements included in the Prospectus and the Registration Statement. The pro forma financial statements included in the Prospectus and the Registration Statement comply as to form in all material respects with the applicable accounting requirements of Regulation S-X under the Securities Act and the pro forma adjustments have been properly applied to the historical amounts in the compilation of those statements.

(m) No Transfer Taxes. There are no transfer taxes or other similar fees or charges under Federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Company of the Placement Shares.

(n) eXtensible Business Reporting Language. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(o) Incorporation and Good Standing of the Company. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction in which it is chartered or organized with full corporate power and authority to own or lease, as the case may be, and to operate its properties and conduct its business as described in the Registration Statement and Prospectus, and is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction which requires such qualification, except where the failure to be so qualified or in good standing would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change.

(p) Capital Stock Matters. The outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and nonassessable; the Placement Shares have been duly and validly authorized and, when issued and delivered to and paid for pursuant to this Agreement, will be fully paid and nonassessable; the holders of shares of capital stock of the Company are not entitled to preemptive or other rights to subscribe for the Placement Shares; and, except as set forth in the Registration Statement and Prospectus, no options, warrants or other rights to purchase, agreements or other obligations to issue, or rights to convert any obligations into or exchange any securities for, shares of capital stock of or ownership interests in the Company are outstanding. The authorized capital stock of the Company conforms as to legal matters to the description thereof contained in each of the Registration Statement and the Prospectus.

(q) Business Arrangements. The Company does not currently own or control, directly or indirectly, any interest in any other corporation, partnership, trust, joint venture, limited liability company,



association, or other business entity. The Company is not a participant in any joint venture, partnership or similar arrangement.

(r) No Violation or Default. The Company is not in violation or default of (i) its charter or bylaws, (ii) the terms of any indenture, contract, lease, mortgage, deed of trust, note agreement, loan agreement or other agreement, obligation, condition, covenant or instrument to which it is a party or bound or to which its property is subject, or (iii) any statute, law, rule, regulation, judgment, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its properties, as applicable, except in the case of clauses (ii) and (iii), for such breach or violation as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Change.

(s) Non-Contravention; No Further Authorizations or Approvals Required. Neither the issue and sale of the Placement Shares nor the consummation of any other of the transactions herein contemplated nor the fulfillment of the terms hereof will conflict with, result in a breach or violation of, or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to, (i) the charter or bylaws of the Company, (ii) the terms of any indenture, contract, lease, mortgage, deed of trust, note agreement, loan agreement or other agreement, obligation, condition, covenant or instrument to which the Company is a party or bound or to which its property is subject, or (iii) any statute, law, rule, regulation, judgment, order or decree applicable to the Company of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its properties, except in the case of clauses (ii) and (iii) as would not have a Material Adverse Change. The Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby and by the Prospectus (i) have been duly authorized by all necessary corporate action and will not result in any violation of the provisions of the charter or bylaws of the Company or any subsidiary, (ii) will not conflict with or constitute a breach of, or default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, or require the consent of any other party to, any indenture, mortgage, loan or credit agreement, note, contract, franchise, lease or other instrument, except for such conflicts, breaches, defaults, liens, charges or encumbrances as would not, individually or in the aggregate, result in a Material Adverse Change and (iii) will not result in any violation of any law, administrative regulation or administrative or court decree applicable to the Company or any subsidiary, except as would not reasonably be expected to have a Material Adverse Change. No consent, approval, authorization, filing with or order of any court or governmental agency or body is required in connection with the transactions contemplated herein, except such as have been obtained under the Securities Act, from the Financial Industry Regulatory Authority ("FINRA") and as may be required under the blue sky laws of any jurisdiction in connection with the purchase and distribution of the Placement Shares in the manner contemplated herein and in the Registration Statement and the Prospectus, any free writing prospectus.

(t) No Material Actions or Proceedings. No action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or its property is pending or, to the knowledge of the Company, threatened that could reasonably be expected to have a Material Adverse Change, except as set forth in or contemplated in the Registration Statement and the Prospectus.

(u) All Necessary Permits, etc. The Company possesses all licenses, certificates, permits and other authorizations issued by all applicable authorities necessary to conduct its business, except in each case, the lack of which would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change, and the Company has not received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Change.

(v) Tax Law Compliance. The Company has filed all tax returns that are required to be filed or has requested extensions thereof (except in any case in which the failure so to file would not have a Material Adverse Change), except as set forth in or contemplated in the Registration Statement and the Prospectus, and has paid all taxes required to be paid by it and any other assessment, fine or penalty levied against it, to the extent that any of the foregoing is due and payable, except for any such assessment, fine or penalty that is currently being contested in good faith or as would not have a Material Adverse Change.

(w) No Labor Disputes. No labor problem or dispute with the employees of the Company exists or, to the knowledge of the Company, is threatened or imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers, contractors or customers, that could have a Material Adverse Change.

(x) Company Not an “Investment Company”. The Company is not and, after giving effect to the offering and sale of the Placement Shares and the application of the proceeds thereof as described in the Registration Statement and Prospectus, will not be an “investment company” as defined in the Investment Company Act of 1940, as amended.

(y) Ownership and Lease of Property. The Company owns or leases all such properties as are necessary to the conduct of its operations as presently conducted in all material respects.

(z) Insurance. The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as the Company reasonably believes are prudent and customary in the businesses in which it is engaged; all policies of insurance and fidelity or surety bonds insuring the Company or its business, assets, employees, officers and directors are in full force and effect; the Company is in compliance with the terms of such policies and instruments in all material respects; and there are no claims by the Company under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; the Company has not been refused any insurance coverage sought or applied for; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Change.

(aa) No Price Stabilization or Manipulation. The Company has not taken, directly or indirectly, without giving effect to any activities of Cowen, any action designed to or that would constitute or that might reasonably be expected to cause or result in, under the Exchange Act or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Placement Shares.

(bb) Exchange Act Compliance. The documents incorporated or deemed to be incorporated by reference in the Prospectus, at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act, and, when read together with the other information in the Prospectus, at the Settlement Dates, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. There is no contract or other document of a character required to be described in the Registration Statement or the Prospectus, or to be filed as an exhibit thereto, which is not described or filed as required (and the Registration Statement and Prospectus contains in all material respects the same description of the foregoing matters contained in the Registration Statement and Prospectus).

8

(cc) No Unlawful Contributions or Other Payments. (i) None of the Company, or any director, officer, or employee thereof, or, to the Company’s knowledge, any agent or representative of the Company, has taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment, giving or receipt of money, property, gifts or anything else of value, directly or indirectly, to any government official (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) in order to influence official action, or to any person in violation of any applicable anti-corruption laws; (ii) the Company has conducted its business in compliance with applicable anti-corruption laws and has instituted and maintained and will continue to maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (iii) the Company will not use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws.

(dd) Compliance with Money Laundering Laws. The operations of the Company are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the “**Anti-Money Laundering Laws**”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Anti-Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(ee) Compliance with OFAC.

(A) None of the Company, or any director, officer, or employee thereof, or, to the Company’s knowledge, any agent, affiliate or representative of the Company, is an individual or entity (“**Person**”) that is, or is owned or controlled by one or more Persons that are

- a. the subject of any sanctions administered or enforced by the U.S. Department of Treasury’s Office of Foreign Assets Control (“**OFAC**”), the United Nations Security Council (“**UNSC**”), the European Union (“**EU**”), Her Majesty’s Treasury (“**HMT**”), or other relevant sanctions authority (collectively, “**Sanctions**”), or
- b. located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Crimea, Cuba, Iran, North Korea, Sudan and Syria).

(B) The Company will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any joint venture partner or other Person:

- a. to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or

b. in any other manner that will result in a violation of Sanctions by any Person (including Cowen).

(C) For the past five (5) years, the Company has not knowingly engaged in, is not now knowingly engaged in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(ff) Company's Accounting System. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company's internal controls over financial reporting are effective and the Company is not aware of any material weakness in its internal controls over financial reporting.

(gg) Disclosure Controls. The Company maintains "disclosure controls and procedures" (as such term is defined in Rule 13a-15(e) under the Exchange Act); such disclosure controls and procedures are effective.

(hh) Compliance with Environmental Laws. Except in each case as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change, the Company (i) is in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) has received and is in compliance with all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business and (iii) has not received notice of any actual or potential liability under any environmental law. The Company has not been named as a "potentially responsible party" under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

(ii) Compliance with ERISA. None of the following events has occurred or exists: (i) a failure to fulfill the obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), and the regulations and published interpretations thereunder with respect to a Plan that is required to be funded, determined without regard to any waiver of such obligations or extension of any amortization period that would reasonably be expected to have a Material Adverse Change; (ii) an audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other federal or state governmental agency or any foreign regulatory agency with respect to the employment or compensation of employees by the Company that would reasonably be expected to have a Material Adverse Change; (iii) any breach of any contractual obligation, or any violation of law or applicable qualification standards, with respect to the employment or compensation of employees by the Company that would reasonably be expected to have a Material Adverse Change. None of the following events has occurred or is reasonably likely to occur: (i) a material increase in the aggregate amount of contributions required to be made to all Plans in the current fiscal year of the Company compared to the amount of such contributions made in the most recently completed fiscal year of the Company; (ii) a material increase in the "accumulated post-retirement benefit obligations" (within the meaning of Statement of Financial Accounting Standards 106) of the Company compared to the amount of such obligations in the most recently completed fiscal year of the Company; (iii) any event or condition giving rise to a liability under Title IV of ERISA that would reasonably be expected to have a Material Adverse Change; or (iv) the filing of a claim by one or more

employees or former employees of the Company related to their employment that would reasonably be expected to have a Material Adverse Change. For purposes of this paragraph, the term “Plan” means a plan (within the meaning of Section 3(3) of ERISA) subject to Title IV of ERISA with respect to which the Company may have any liability.

(jj) **Intellectual Property.** The Company owns, possesses, licenses or has other rights to use, on reasonable terms, all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, know-how and other intellectual property (collectively, the “**Intellectual Property**”) necessary for the conduct of the Company’s business in all material respects as now conducted or as proposed in the Registration Statement and Prospectus to be conducted. Except as set forth in the Registration Statement and the Prospectus (a) there are no rights of third parties to any such Intellectual Property; (b) to the Company’s knowledge, there is no material infringement by third parties of any such Intellectual Property; (c) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the Company’s rights in or to any such Intellectual Property, and, except as would not reasonably be expected to have a Material Adverse Change, the Company is unaware of any facts which would form a reasonable basis for any such claim; (d) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property, and, except as would not reasonably be expected to have a Material Adverse Change, the Company is unaware of any facts which would form a reasonable basis for any such claim; (e) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others that the Company infringes or otherwise violates any patent, trademark, copyright, trade secret or other proprietary rights of others, and, except as would not reasonably be expected to have a Material Adverse Change, the Company is unaware of any other fact which would form a reasonable basis for any such claim; (f) there is no U.S. patent which contains claims that dominate any Intellectual Property described in the Prospectus and any free writing prospectus as being owned by or licensed to the Company or that interferes with the issued claims of any such Intellectual Property; and (g) there is no prior art that may render any U.S. patent held by the Company invalid, and all prior art of which the Company is aware that may be material to the validity of a U.S. patent or to the patentability of a U.S. patent application has been disclosed to the U.S. Patent and Trademark Office.

(kk) **Compliance with Applicable Laws.** Except as described in the Registration Statement and the Prospectus, the Company (i) is and at all times has been in compliance with all local, state, federal, national, supranational and foreign statutes, rules and regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, storage, import, export or disposal of any product manufactured or distributed by the Company, including, without limitation, the Federal Food, Drug and Cosmetic Act (21 U.S.C. § 301 et seq.), and the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the regulations promulgated pursuant to such laws, and any successor government programs, and comparable state laws, regulations relating to Good Laboratory Practices and Good Clinical Practices (collectively, the “**Applicable Laws**”), except for such non-compliance as would not, individually or in the aggregate, have a Material Adverse Change; (ii) has not received any notice from any court or arbitrator or governmental or regulatory authority alleging or asserting non-compliance with any Applicable Laws or any licenses, exemptions, certificates, approvals, clearances, authorizations, permits, registrations and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”), except for such non-compliance as would not, individually or in the aggregate, have a Material Adverse Change; (iii) possesses all material Authorizations and such Authorizations are valid and in full force and effect and is not in violation of any term of any such Authorizations, except for such violations as would not, individually or in the aggregate, have a Material Adverse Change; (iv) has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations nor, to the Company’s knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened, except

such as would not, individually or in the aggregate, have a Material Adverse Change; (v) has not received written notice that any court or arbitrator or governmental or regulatory authority has taken, is taking or intends to take action to materially limit, suspend, materially modify or revoke any Authorizations nor, to the Company's knowledge, is any such limitation, suspension, modification or revocation threatened, except such as would not, individually or in the aggregate, have a Material Adverse Change; (vi) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and accurate on the date filed in all material respects (or were corrected or supplemented by a subsequent submission); and (vii) is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority.

(ll) Listing. The Company is subject to and in compliance in all material respects with the reporting requirements of Section 13 or Section 15(d) of the Exchange Act. The Common Stock is registered pursuant to Section 12(b) or Section 12(g) of the Exchange Act and is listed on the Nasdaq, and the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from Nasdaq, nor has the Company received any written notification that the Commission or Nasdaq is contemplating terminating such registration or listing.

(mm) Brokers. Except for Cowen, there is no broker, finder or other party that is entitled to receive from the Company any brokerage or finder's fee or other fee or commission as a result of any transactions contemplated by this Agreement.

(nn) No Outstanding Loans or Other Indebtedness. Except as described in the Prospectus, there are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees or indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of the members of any of them.

(oo) No Reliance. The Company has not relied upon Cowen or legal counsel for Cowen for any legal, tax or accounting advice in connection with the offering and sale of the Placement Shares.

(pp) Registration Rights. Other than as set forth in the Registration Statement and Prospectus, no holders of securities of the Company have rights to the registration of such securities under the Registration Statement, except such rights which have been duly waived in accordance with their terms and with the General Corporation Law of the State of Delaware.

(qq) Compliance with Laws. The Company has not been advised, and has no reason to believe, that it and each of its subsidiaries are not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, except where failure to be so in compliance would not reasonably be expected to result in a Material Adverse Change.

Any certificate signed by an officer of the Company and delivered to Cowen or to counsel for Cowen shall be deemed to be a representation and warranty by the Company to Cowen as to the matters set forth therein.

The Company acknowledges that Cowen and, for purposes of the opinions to be delivered pursuant to Section 7 hereof, counsel to the Company and counsel to Cowen, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

7. Covenants of the Company. The Company covenants and agrees with Cowen that:

(a) Registration Statement Amendments. After the date of this Agreement and during any period in which a Prospectus relating to any Placement Shares is required to be delivered by Cowen under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), (i) the Company will notify Cowen promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference or amendments not related to the Placement Shares, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus related to the Placement Shares has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus related to the Placement Shares or for additional information related to the Placement Shares, (ii) the Company will prepare and file with the Commission, promptly upon Cowen's reasonable request, any amendments or supplements to the Registration Statement or Prospectus that, in Cowen's reasonable opinion, may be necessary or advisable in connection with the distribution of the Placement Shares by Cowen (*provided, however*, that (A) the failure of Cowen to make such request shall not relieve the Company of any obligation or liability hereunder, or affect Cowen's right to rely on the representations and warranties made by the Company in this Agreement, and (B) the only remedy Cowen shall have with respect to the failure to make such filing (other than Cowen's right under Section 9 hereof) will be to cease making sales under this Agreement until such amendment or supplement is filed); (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus, other than documents incorporated by reference, relating to the Placement Shares or a security convertible into the Placement Shares unless a copy thereof has been submitted to Cowen within a reasonable period of time before the filing and Cowen has not reasonably objected thereto (*provided, however*, that (A) the failure of Cowen to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect Cowen's right to rely on the representations and warranties made by the Company in this Agreement and (B) the only remedy Cowen shall have with respect to the failure to provide Cowen with such copy or the filing of such amendment or supplement despite Cowen's objection (other than Cowen's rights under Section 9 hereof) will be to cease making sales under this Agreement) and the Company will furnish to Cowen at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via EDGAR; (iv) the Company will cause each amendment or supplement to the Prospectus, other than documents incorporated by reference, to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act, and (v) prior to the termination of this Agreement, the Company will notify Cowen if at any time the Registration Statement shall no longer be effective as a result of the passage of time pursuant to Rule 415 under the Securities Act or otherwise.

(b) Notice of Commission Stop Orders. The Company will advise Cowen, promptly after it receives notice or obtains knowledge thereof, of the issuance or threatened issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, of the suspension of the qualification of the Placement Shares for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and it will promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued.

(c) Delivery of Prospectus; Subsequent Changes. During any period in which a Prospectus relating to the Placement Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale of the Placement Shares, (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will comply with all requirements imposed upon it by the Securities Act, as from time to time in force, and to file on or before their respective due dates all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, 15(d) or any other provision of or under the Exchange Act. If during such period any event occurs as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state a material fact

necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend or supplement the Registration Statement or Prospectus to comply with the Securities Act, the Company will promptly notify Cowen to suspend the offering of Placement Shares during such period and the Company will promptly amend or supplement the Registration Statement or Prospectus (at the expense of the Company) so as to correct such statement or omission or effect such compliance; *provided, however*, that the Company may delay the filing of any amendment or supplement if, in the judgment of the Company, it is in the best interest of the Company to do so, *provided, further*, that no Placement Notice is in effect during such time.

(d) Listing of Placement Shares. During any period in which the Prospectus relating to the Placement Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale of the Placement Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will use its commercially reasonable efforts to cause the Placement Shares to be listed on Nasdaq and to qualify the Placement Shares for sale under the securities laws of such jurisdictions as Cowen reasonably designates and to continue such qualifications in effect so long as required for the distribution of the Placement Shares; *provided, however*, that the Company shall not be required in connection therewith to qualify as a foreign corporation or dealer in securities or file a general consent to service of process in any jurisdiction.

(e) Delivery of Registration Statement and Prospectus. The Company will furnish to Cowen and its counsel (at the expense of the Company) copies of the Registration Statement, the Prospectus (including all documents incorporated by reference therein) and all amendments and supplements to the Registration Statement or Prospectus that are filed with the Commission during any period in which a Prospectus relating to the Placement Shares is required to be delivered under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities as Cowen may from time to time reasonably request and, at Cowen's request, will also furnish copies of the Prospectus to each exchange or market on which sales of the Placement Shares may be made; *provided, however*, that the Company shall not be required to furnish any document (other than the Prospectus) to Cowen to the extent such document is available on EDGAR.

(f) Earnings Statement. The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement covering a 12-month period that satisfies the provisions of Section 11(a) and Rule 158 of the Securities Act. For the avoidance of doubt, the Company's timely compliance with the reporting requirements of the Exchange Act shall be deemed to satisfy this Section 7(f).

(g) Expenses. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, in accordance with the provisions of Section 11 hereunder, will pay the following expenses all incident to the performance of its obligations hereunder, including, but not limited to, expenses relating to (i) the preparation, printing and filing of the Registration Statement and each amendment and supplement thereto, of each Prospectus and of each amendment and supplement thereto, (ii) the preparation, issuance and delivery of the Placement Shares, (iii) the qualification of the Placement Shares under securities laws in accordance with the provisions of Section 7(d) of this Agreement, including filing fees (provided, however, that any fees or disbursements of counsel for Cowen in connection therewith shall be paid by Cowen except as set forth in (vii) below), (iv) the printing and delivery to Cowen of copies of the Prospectus and any amendments or supplements thereto, and of this Agreement, (v) the fees and expenses incurred in connection with the listing or qualification of the Placement Shares for trading on Nasdaq, (vi) the filing fees and expenses, if any, of the Commission, (vii) the filing fees and associated legal expenses of Cowen's outside counsel for any blue sky memorandum and filings with the FINRA



Corporate Financing Department, such legal expense reimbursement not to exceed \$20,000, and (viii) the reasonable fees and disbursements of Cowen's counsel in an amount not to exceed \$40,000.

(h) Use of Proceeds. The Company will use the Net Proceeds as described in the Prospectus in the section entitled "Use of Proceeds."

(i) Notice of Other Sales. During the pendency of any Placement Notice given hereunder, and for five (5) trading days following the termination of any Placement Notice given hereunder, the Company shall provide Cowen notice as promptly as reasonably possible before it offers to sell, contracts to sell, sells, grants any option to sell or otherwise disposes of any shares of Common Stock (other than Placement Shares offered pursuant to the provisions of this Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire Common Stock; *provided*, that such notice shall not be required in connection with (i) the issuance, grant or sale of Common Stock, options to purchase shares of Common Stock or Common Stock issuable upon the exercise of options or other equity awards pursuant to the any equity incentive plan, stock option, stock bonus, employee stock purchase, or other stock plan or arrangement described in the Prospectus, (ii) the issuance of securities in connection with an acquisition, merger or sale or purchase of assets, (iii) the issuance or sale of Common Stock pursuant to any dividend reinvestment plan that the Company may adopt from time to time provided the implementation of such is disclosed to Cowen in advance, (iv) the issuance of any shares of Common Stock issuable upon the exchange, conversion or redemption of securities or the exercise of warrants, options or other rights in effect or outstanding, or (v) the issuance of any shares of Common Stock, or securities convertible into or exercisable for Common Stock, offered and sold in a privately negotiated transaction to vendors, customers, investors, strategic partners or potential strategic partners, licensors, and otherwise conducted in a manner so as not to be integrated with the offering of the Placement Shares contemplated hereby. Notwithstanding the foregoing provisions, nothing herein shall be construed to restrict the Company's ability to file, or require the Company to provide notice Cowen of the filing of, a registration statement under the Securities Act.

(j) Change of Circumstances. The Company will, at any time during a fiscal quarter in which the Company intends to tender a Placement Notice or sell Placement Shares, advise Cowen promptly after it shall have received notice or obtained knowledge thereof, of any information or fact that would alter or affect in any material respect any opinion, certificate, letter or other document provided to Cowen pursuant to this Agreement.

(k) Due Diligence Cooperation. The Company will cooperate with any reasonable due diligence review conducted by Cowen or its agents in connection with the transactions contemplated hereby, including, without limitation, providing information and making available documents and senior corporate officers, during regular business hours and at the Company's principal offices, as Cowen may reasonably request.

(l) Required Filings Relating to Placement of Placement Shares. The Company agrees that on such dates as the Securities Act shall require, the Company will (i) file a prospectus supplement with the Commission under the applicable paragraph of Rule 424(b) under the Securities Act (each and every filing under Rule 424(b), a "**Filing Date**"), which prospectus supplement will set forth, within the relevant period, the amount of Placement Shares sold through Cowen, the Net Proceeds to the Company and the compensation payable by the Company to Cowen with respect to such Placement Shares, and (ii) deliver such number of copies of each such prospectus supplement to each exchange or market on which such sales were effected as may be required by the rules or regulations of such exchange or market.

(m) Representation Dates; Certificate. On or prior to the First Delivery Date, and each time thereafter during the term of this Agreement, the Company (i) files the Prospectus relating to the Placement Shares or amends or supplements the Registration Statement or the Prospectus relating to the Placement

Shares (other than a prospectus supplement filed in accordance with Section 7(l) of this Agreement) by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of document(s) by reference to the Registration Statement or the Prospectus relating to the Placement Shares; (ii) files an annual report on Form 10-K under the Exchange Act; (iii) files its quarterly reports on Form 10-Q under the Exchange Act; or (iv) files a report on Form 8-K containing amended financial information (other than an earnings release or other information “furnished” under Items 2.02, 7.01, or 9.01 of Form 8-K) under the Exchange Act (each date of filing of one or more of the documents referred to in clauses (i) through (iv) shall be a “**Representation Date**”); the Company shall furnish Cowen with a certificate, in the form attached hereto as Exhibit 7(m), within three (3) Trading Days of any Representation Date, if requested by Cowen. The requirement to provide a certificate under this Section 7(m) shall be automatically waived for any Representation Date occurring at a time at which no Placement Notice is pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Placement Notice hereunder (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date; *provided, however*, that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Placement Shares following a Representation Date when the Company relied on such waiver and did not provide Cowen with a certificate under this Section 7(m), then before the Company delivers the Placement Notice or Cowen sells any Placement Shares, the Company shall provide Cowen with a certificate, in the form attached hereto as Exhibit 7(m), dated the date of the Placement Notice.

(n) Legal Opinions. On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit 7(m) for which no waiver is applicable, the Company shall cause to be furnished to Cowen a written opinion of each of Morgan, Lewis & Bockius LLP (“**Company Counsel**”), Hogan Lovells LLP and Hogan Lovells International LLP, special regulatory counsel for the Company (“**Regulatory Counsel**”), Kendall Square IP Strategies, LLC, special intellectual property counsel for the Company (“**Patent Counsel**”), Lando & Anastasi, LLP, special intellectual property counsel for the Company (“**IP Counsel**”), or, in each case, other counsel satisfactory to Cowen, in form and substance satisfactory to Cowen and its counsel, dated the date that the opinion is required to be delivered, substantially similar to the form attached hereto as Exhibit 7(n)(i) through Exhibit 7(n)(iv), respectively, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented; *provided, however*, that in lieu of such opinions for subsequent Representation Dates, each counsel may furnish Cowen with a letter (a “**Reliance Letter**”) to the effect that Cowen may rely on a prior opinion delivered under this Section 7(n) to the same extent as if it were dated the date of such letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented at such Representation Date).

(o) Comfort Letter. On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit 7(m) for which no waiver is applicable, the Company shall cause its independent accountants to furnish Cowen letters (the “**Comfort Letters**”), dated the date the Comfort Letter is delivered, in form and substance reasonably satisfactory to Cowen, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act and the Public Company Accounting Oversight Board, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants’ “comfort letters” to Cowen in connection with registered public offerings (the first such letter, the “**Initial Comfort Letter**”) and (iii) updating the Initial Comfort Letter with any information that would have been included in the Initial Comfort Letter had it been given on such date and modified as necessary to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter.

16

(p) Market Activities. The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Placement Shares or (ii) sell, bid for, or purchase the Placement Shares to be issued and sold pursuant to this Agreement in violation of Regulation M, or pay anyone any compensation for soliciting purchases of the Placement Shares other than Cowen; *provided, however*, that the Company may bid for and purchase shares of its common stock in accordance with Rule 10b-18 under the Exchange Act.

(q) Insurance. The Company and its subsidiaries shall maintain, or cause to be maintained, insurance in such amounts and covering such risks as is reasonable and customary for the business for which it is engaged.

(r) Compliance with Laws. The Company and each of its subsidiaries shall use commercially reasonable efforts to maintain, or cause to be maintained, all applicable material environmental permits, licenses and other authorizations required by applicable federal, state and local law in order to conduct their businesses as described in the Prospectus, and the Company and each of its subsidiaries shall conduct their businesses, or cause their businesses to be conducted, in substantial compliance with such permits, licenses and authorizations and with applicable environmental laws, except where the failure to maintain or be in compliance with such permits, licenses and authorizations would not reasonably be expected to result in a Material Adverse Change.

(s) Investment Company Act. The Company will conduct its affairs in such a manner so as to reasonably ensure that neither it nor its subsidiaries will be or become, at any time prior to the termination of this Agreement, an “investment company,” as such term is defined in the Investment Company Act, assuming no change in the Commission’s current interpretation as to entities that are not considered an investment company.

(t) Securities Act and Exchange Act. The Company will use commercially reasonable efforts to comply with all requirements imposed upon it by the Securities Act and the Exchange Act as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Placement Shares as contemplated by the provisions hereof and the Prospectus.

(u) No Offer to Sell. Other than the Prospectus or a free writing prospectus (as defined in Rule 405 under the Securities Act) approved in advance by the Company and Cowen in its capacity as principal or agent hereunder, neither Cowen nor the Company (including its agents and representatives, other than Cowen in its capacity as such) will make, use, prepare, authorize, approve or refer to any written communication (as defined in Rule 405 under the Securities Act), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy Common Stock hereunder.

(v) Sarbanes-Oxley Act. The Company and its subsidiaries will use commercially reasonable efforts to comply with all effective applicable provisions of the Sarbanes-Oxley Act.

8. Conditions to Cowen’s Obligations. The obligations of Cowen hereunder with respect to a Placement will be subject to the continuing accuracy and completeness of the representations and warranties made by the Company herein, to the due performance by the Company of its obligations hereunder, to the completion by Cowen of a due diligence review satisfactory to Cowen in its reasonable judgment, and to the continuing satisfaction (or waiver by Cowen in its sole discretion) of the following additional conditions:



- (a) Registration Statement Effective. The Registration Statement shall be effective and shall be available for (i) all sales of Placement Shares issued pursuant to all prior Placement Notices and (ii) the sale of all Placement Shares contemplated to be issued by any Placement Notice.
- (b) No Material Notices. None of the following events shall have occurred and be continuing: (i) receipt by the Company or any of its subsidiaries of any request for additional information from the Commission or any other federal or state governmental authority during the period of effectiveness of the Registration Statement, the response to which would require any post-effective amendments or supplements to the Registration Statement or the Prospectus; (ii) the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose; (iii) receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Placement Shares for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; or (iv) the occurrence of any event that makes any material statement made in the Registration Statement or the Prospectus or any material document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, related Prospectus or such documents so that, in the case of the Registration Statement, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading and, that in the case of the Prospectus, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.
- (c) No Misstatement or Material Omission. Cowen shall not have advised the Company that the Registration Statement or Prospectus, or any amendment or supplement thereto, contains an untrue statement of fact that in Cowen's reasonable opinion is material, or omits to state a fact that in Cowen's reasonable opinion is material and is required to be stated therein or is necessary to make the statements therein not misleading.
- (d) Material Changes. Except as contemplated in the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any material adverse change, on a consolidated basis, in the authorized capital stock of the Company or any Material Adverse Change or any development that could reasonably be expected to result in a Material Adverse Change.
- (e) Company Counsel Legal Opinion. Cowen shall have received the opinions of Company Counsel required to be delivered pursuant to Section 7(n) on or before the date on which such delivery of such opinion is required pursuant to Section 7(n).
- (f) Regulatory Counsel Legal Opinion. Cowen shall have received the opinions of Regulatory Counsel required to be delivered pursuant to Section 7(n) on or before the date on which such delivery of such opinion is required pursuant to Section 7(n).
- (g) Patent Counsel Legal Opinion. Cowen shall have received the opinions of Patent Counsel required to be delivered pursuant to Section 7(n) on or before the date on which such delivery of such opinion is required pursuant to Section 7(n).
- (h) IP Counsel Legal Opinion. Cowen shall have received the opinions of IP Counsel required to be delivered pursuant to Section 7(n) on or before the date on which such delivery of such opinion is required pursuant to Section 7(n).

(i) Cowen Counsel Legal Opinion. Cowen shall have received from Ropes & Gray LLP, counsel for Cowen, such opinion or opinions, on or before the date on which the delivery of the Company Counsel legal opinion is required pursuant to Section 7(n), with respect to such matters as Cowen may reasonably require, and the Company shall have furnished to such counsel such documents as they request for enabling them to pass upon such matters.

(j) Comfort Letter. Cowen shall have received the Comfort Letter required to be delivered pursuant to Section 7(o) on or before the date on which such delivery of such Comfort Letter is required pursuant to Section 7(o).

(k) Representation Certificate. Cowen shall have received the certificate required to be delivered pursuant to Section 7(m) on or before the date on which delivery of such certificate is required pursuant to Section 7(m).

(l) Secretary's Certificate. On or prior to the First Delivery Date, Cowen shall have received a certificate, signed on behalf of the Company by its corporate Secretary, in form and substance satisfactory to Cowen and its counsel.

(m) No Suspension. Trading in the Common Stock shall not have been suspended on Nasdaq.

(n) Other Materials. On each date on which the Company is required to deliver a certificate pursuant to Section 7(m), the Company shall have furnished to Cowen such appropriate further information, certificates and documents as Cowen may have reasonably requested. All such opinions, certificates, letters and other documents shall have been in compliance with the provisions hereof. The Company will furnish Cowen with such conformed copies of such opinions, certificates, letters and other documents as Cowen shall have reasonably requested.

(o) Securities Act Filings Made. All filings with the Commission required by Rule 424 under the Securities Act to have been filed prior to the issuance of any Placement Notice hereunder shall have been made within the applicable time period prescribed for such filing by Rule 424.

(p) Approval for Listing. The Placement Shares shall either have been (i) approved for listing on Nasdaq, subject only to notice of issuance, or (ii) the Company shall have filed an application for listing of the Placement Shares on Nasdaq at, or prior to, the issuance of any Placement Notice.

(q) No Termination Event. There shall not have occurred any event that would permit Cowen to terminate this Agreement pursuant to Section 11(a).

#### 9. Indemnification and Contribution

(a) Company Indemnification. The Company agrees to indemnify and hold harmless Cowen, the directors, officers, partners, employees and agents of Cowen and each person, if any, who (i) controls Cowen within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, or (ii) is controlled by or is under common control with Cowen from and against any and all losses, claims, liabilities, reasonable and documented expenses and damages (including, but not limited to, any and all reasonable and documented investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(c)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which Cowen, or any such person, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages

arise out of or are based, directly or indirectly, on (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement to the Registration Statement or the Prospectus or in any free writing prospectus or in any application or other document executed by or on behalf of the Company or based on written information furnished by or on behalf of the Company filed in any jurisdiction in order to qualify the Placement Shares under the securities laws thereof or filed with the Commission, (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading or (z) any breach by any of the indemnifying parties of any of their respective representations, warranties and agreements contained in this Agreement; *provided, however*, that this indemnity agreement shall not apply to the extent that such loss, claim, liability, expense or damage arises from the sale of the Placement Shares pursuant to this Agreement and is caused directly or indirectly by an untrue statement or omission made in reliance upon and in conformity with the Agent's Information (as defined below). This indemnity agreement will be in addition to any liability that the Company might otherwise have. For purposes of this Agreement, "*Agent's Information*" shall mean, solely the following information in the Prospectus: the first and fourth sentences of the eighth paragraph and the tenth paragraph under the caption "Plan of Distribution" in the Prospectus.

(b) Cowen Indemnification. Cowen agrees to indemnify and hold harmless the Company and its directors and each officer of the Company that signed the Registration Statement, and each person, if any, who (i) controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or (ii) is controlled by or is under common control with the Company against any and all loss, liability, claim, reasonable and documented damage and expense described in the indemnity contained in Section 9(a), as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendments thereto) or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Agent's Information (as defined above).

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice in writing of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party in writing of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable and documented costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right

to direct the defense of such action on behalf of the indemnified party) or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable and documented fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly after the indemnifying party receives a written invoice relating to fees, disbursements and other charges in reasonable detail. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this [Section 9](#) (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding.

(d) **Contribution.** In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this [Section 9](#) is applicable in accordance with its terms but for any reason is held to be unavailable from the Company or Cowen, the Company and Cowen will contribute to the total losses, claims, liabilities, reasonable and documented expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than Cowen, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) to which the Company and Cowen may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and Cowen on the other. The relative benefits received by the Company on the one hand and Cowen on the other hand shall be deemed to be in the same proportion as the total Net Proceeds from the sale of the Placement Shares (before deducting expenses) received by the Company bear to the total compensation received by Cowen from the sale of Placement Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and Cowen, on the other, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or Cowen, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and Cowen agree that it would not be just and equitable if contributions pursuant to this [Section 9\(d\)](#) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this [Section 9\(d\)](#) shall be deemed to include, for the purpose of this [Section 9\(d\)](#), any documented legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with [Section 9\(c\)](#) hereof. Notwithstanding the foregoing provisions of this [Section 9\(d\)](#), Cowen shall not be required to contribute any amount in excess of the commissions received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For

purposes of this Section 9(d), any person who controls a party to this Agreement within the meaning of the Securities Act, and any officers, directors, partners, employees or agents of Cowen, will have the same rights to contribution as that party, and each officer and director of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 9(d), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 9(d) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c) hereof.

10. Representations and Agreements to Survive Delivery. The indemnity and contribution agreements contained in Section 9 of this Agreement and all representations and warranties of the Company herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of Cowen, any controlling persons, or the Company (or any of their respective officers, directors or controlling persons), (ii) delivery and acceptance of the Placement Shares and payment therefor or (iii) any termination of this Agreement.

11. Termination.

(a) Cowen shall have the right by giving written notice as hereinafter specified at any time to terminate this Agreement if (i) any Material Adverse Change, or any development that would reasonably be expected to result in a Material Adverse Change has occurred that, in the reasonable judgment of Cowen, would materially impair the ability of Cowen to sell the Placement Shares hereunder, (ii) the Company shall have failed, refused or been unable to perform any agreement on its part to be performed hereunder; *provided, however*, in the case of any failure of the Company to deliver (or cause another person to deliver) any certification, opinion, or letter required under Sections 7(m), 7(n), or 7(o), Cowen's right to terminate shall not arise unless such failure to deliver (or cause to be delivered) continues for more than thirty (30) days from the date such delivery was required; or (iii) any other condition of Cowen's obligations hereunder is not fulfilled, or (iv), any suspension or limitation of trading in the Placement Shares or in securities generally on Nasdaq shall have occurred. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. If Cowen elects to terminate this Agreement as provided in this Section 11(a), Cowen shall provide the required notice as specified in Section 12 (Notices).

(b) The Company shall have the right, by giving ten (10) days notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(c) Cowen shall have the right, by giving ten (10) days notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.



(d) Unless earlier terminated pursuant to this Section 11, this Agreement shall automatically terminate upon the issuance and sale of all of the Placement Shares through Cowen on the terms and subject to the conditions set forth herein; *provided* that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(e) This Agreement shall remain in full force and effect unless terminated pursuant to Sections 11(a), (b), (c), or (d) above or otherwise by mutual agreement of the parties; *provided, however*, that any such termination by mutual agreement shall in all cases be deemed to provide that Section 7(g), Section 9, Section 10, Section 16 and Section 17 shall remain in full force and effect. Upon termination of this Agreement, subject to Section 11(f), the Company shall not have any liability to Cowen for any discount, commission or other compensation with respect to any Placement Shares not otherwise sold by Cowen under this Agreement, or otherwise, except with respect to reimbursement of expenses pursuant to Section 7(b).

(f) Any termination of this Agreement shall be effective on the date specified in such notice of termination; *provided, however*, that such termination shall not be effective until the close of business on the date of receipt of such notice by Cowen or the Company, as the case may be. If such termination shall occur prior to the Settlement Date for any sale of Placement Shares, such Placement Shares shall settle in accordance with the provisions of this Agreement.

12. Notices. All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing, unless otherwise specified in this Agreement, and if sent to Cowen, shall be delivered to Cowen at Cowen and Company, LLC, 599 Lexington Avenue, New York, NY 10022, fax no. 646-562-1124, Attention: General Counsel, with copy to Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, Massachusetts 02199, fax: (617) 235-0392, Attention: Patrick O'Brien, Esq.; or if sent to the Company, shall be delivered to Rhythm Pharmaceuticals, Inc. 500 Boylston Street, 11th Floor, Boston, MA 02116, attention: Chief Financial Officer, with a copy to Morgan, Lewis & Bockius LLP, One Federal Street, Boston, MA 02110, attention: Julio E. Vega, Esq. Each party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose. Each such notice or other communication shall be deemed given (i) when delivered personally or by verifiable facsimile transmission (with an original to follow) on or before 4:30 p.m., New York City time, on a Business Day (as defined below), or, if such day is not a Business Day on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which the Nasdaq and commercial banks in the City of New York are open for business.

13. Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Company and Cowen and their respective successors and the affiliates, controlling persons, officers and directors referred to in Section 9 hereof. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; *provided, however*, that Cowen may assign its rights and obligations hereunder to an affiliate of Cowen without obtaining the Company's consent, so long as such affiliate is a registered broker-dealer.

14. Adjustments for Share Splits. The parties acknowledge and agree that all share-related numbers contained in this Agreement shall be adjusted to take into account any share split, share dividend or similar event effected with respect to the Common Stock.

15. Entire Agreement; Amendment; Severability. This Agreement (including all schedules and exhibits attached hereto and Placement Notices issued pursuant hereto) constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and Cowen. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement.

16. Applicable Law; Consent to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of New York without regard to the principles of conflicts of laws. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York, borough of Manhattan, for the adjudication of any dispute hereunder or in connection with any transaction contemplated hereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof (certified or registered mail, return receipt requested) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law.

17. Waiver of Jury Trial. The Company and Cowen each hereby irrevocably waives any right it may have to a trial by jury in respect of any claim based upon or arising out of this Agreement or any transaction contemplated hereby.

18. Absence of Fiduciary Relationship. The Company acknowledges and agrees that:

(a) Cowen has been retained solely to act as sales agent in connection with the sale of the Placement Shares and that no fiduciary, advisory or agency relationship between the Company and Cowen has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether Cowen has advised or is advising the Company on other matters;

(b) the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) the Company has been advised that Cowen and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that Cowen has no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

(d) the Company waives, to the fullest extent permitted by law, any claims it may have against Cowen, for breach of fiduciary duty or alleged breach of fiduciary duty in connection with this Agreement and agrees that Cowen shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, partners, employees or creditors of the Company.

19. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement by one party to the other may be made by facsimile transmission.

**[Remainder of Page Intentionally Blank]**



Keith Gottesdiener  
Hunter Smith

---

**Compensation**

Cowen shall be paid compensation equal to 3.0% of the gross proceeds from the sales of Common Stock pursuant to the terms of this Agreement.

---

**Schedule Of Subsidiaries**

Rhythm Securities Corp.

---

---

(1) NTD: Opinions will be provided separately.

---



**OFFICER CERTIFICATE**

The undersigned, the duly qualified and elected \_\_\_\_\_, of Rhythm Pharmaceuticals, Inc. ("**Company**"), a Delaware corporation, does hereby certify in such capacity and on behalf of the Company, pursuant to Section 7(m) of the Sales Agreement dated November 9, 2018 (the "**Sales Agreement**") between the Company and Cowen and Company, LLC, that to the best of the knowledge of the undersigned. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Sales Agreement.

(i) The representations and warranties of the Company in Section 6 of the Sales Agreement (A) to the extent such representations and warranties are subject to qualifications and exceptions contained therein relating to materiality or Material Adverse Change, are true and correct on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof, except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, and (B) to the extent such representations and warranties are not subject to any qualifications or exceptions, are true and correct in all material respects as of the date hereof as if made on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date; and

(ii) The Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied pursuant to the Sales Agreement at or prior to the date hereof.

By: \_\_\_\_\_  
Name:  
Title:

Date: \_\_\_\_\_

---

**RHYTHM PHARMACEUTICALS, INC.**

**TO**

**[NAME OF TRUSTEE]**

**Trustee**

**Indenture**

**Dated as of \_\_\_\_\_, 20\_\_**

**Subordinated Debt Securities**

---

## TABLE OF CONTENTS

|             |  | <u>Page</u> |
|-------------|--|-------------|
| ARTICLE 1   | DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION                                    | 2           |
| SECTION 101 | Definitions  | 2           |
| SECTION 102 | Compliance Certificates and Opinions   | 13          |
| SECTION 103 | Form of Documents Delivered to Trustee   | 13          |
| SECTION 104 | Acts of Holders  | 14          |
| SECTION 105 | Notices, etc., to Trustee and Company  | 15          |
| SECTION 106 | Notice to Holders; Waiver  | 16          |
| SECTION 107 | Counterparts; Effect of Headings and Table of Contents                                     | 17          |
| SECTION 108 | Successors and Assigns   | 17          |
| SECTION 109 | Severability Clause  | 17          |
| SECTION 110 | Benefits of Indenture  | 17          |
| SECTION 111 | Governing Law  | 17          |
| SECTION 112 | Legal Holidays   | 17          |
| SECTION 113 | Limited Liability; Immunity of Stockholders, Directors, Officers and Agents of the Company | 18          |
| SECTION 114 | Conflict with Trust Indenture Act  | 18          |
| ARTICLE 2   | SECURITIES FORMS   | 18          |
| SECTION 201 | Forms of Securities  | 18          |
| SECTION 202 | Form of Trustee's Certificate of Authentication  | 19          |
| SECTION 203 | Securities Issuable in Global Form   | 19          |
| ARTICLE 3   | THE SECURITIES   | 20          |
| SECTION 301 | Amount Unlimited; Issuable in Series   | 20          |
| SECTION 302 | Denominations  | 23          |
| SECTION 303 | Execution, Authentication, Delivery and Dating   | 24          |
| SECTION 304 | Temporary Securities   | 26          |
| SECTION 305 | Registration, Registration of Transfer, Conversion and Exchange                            | 28          |
| SECTION 306 | Mutilated, Destroyed, Lost and Stolen Securities   | 31          |
| SECTION 307 | Payment of Interest; Interest Rights Preserved   | 33          |
| SECTION 308 | Persons Deemed Owners  | 35          |

**TABLE OF CONTENTS**  
(continued)

|             |   | <b>Page</b> |
|-------------|---|-------------|
| SECTION 309 | Cancellation  | 35          |
| SECTION 310 | Computation of Interest   | 36          |
| SECTION 311 | CUSIP Numbers   | 36          |
| ARTICLE 4   | SATISFACTION AND DISCHARGE  | 36          |
| SECTION 401 | Satisfaction and Discharge of Indenture   | 36          |
| SECTION 402 | Application of Trust Funds  | 37          |
| ARTICLE 5   | REMEDIES  | 37          |
| SECTION 501 | Events of Default   | 37          |
| SECTION 502 | Acceleration of Maturity; Rescission and Annulment  | 39          |
| SECTION 503 | Collection of Indebtedness and Suits for Enforcement by Trustee   | 40          |
| SECTION 504 | Trustee May File Proofs of Claim  | 41          |
| SECTION 505 | Trustee May Enforce Claims Without Possession of Securities or Coupons                                  | 42          |
| SECTION 506 | Application of Money Collected  | 42          |
| SECTION 507 | Limitation on Suits   | 42          |
| SECTION 508 | Unconditional Right of Holders to Receive Principal, Premium or Make-Whole Amount, if any, and Interest | 43          |
| SECTION 509 | Restoration of Rights and Remedies  | 43          |
| SECTION 510 | Rights and Remedies Cumulative  | 43          |
| SECTION 511 | Delay or Omission Not Waiver  | 43          |
| SECTION 512 | Control by Holders of Securities  | 43          |
| SECTION 513 | Waiver of Past Defaults   | 44          |
| SECTION 514 | Waiver of Usury, Stay or Extension Laws   | 44          |
| SECTION 515 | Undertaking for Costs   | 44          |
| ARTICLE 6   | THE TRUSTEE   | 45          |
| SECTION 601 | Notice of Defaults  | 45          |
| SECTION 602 | Certain Rights of Trustee   | 45          |
| SECTION 603 | Not Responsible for Recitals or Issuance of Securities  | 47          |
| SECTION 604 | May Hold Securities   | 47          |
| SECTION 605 | Money Held in Trust   | 48          |

**TABLE OF CONTENTS**  
(continued)

|                   |   | <b>Page</b> |
|-------------------|---|-------------|
| SECTION 606       | Compensation and Reimbursement  | 48          |
| SECTION 607       | Corporate Trustee Required; Eligibility; Conflicting Interests  | 48          |
| SECTION 608       | Resignation and Removal; Appointment of Successor   | 49          |
| SECTION 609       | Acceptance of Appointment by Successor  | 50          |
| SECTION 610       | Merger, Conversion, Consolidation or Succession to Business   | 51          |
| SECTION 611       | Appointment of Authenticating Agent   | 51          |
| SECTION 612       | Certain Duties and Responsibilities of the Trustee  | 53          |
| <b>ARTICLE 7</b>  | <b>HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY</b>  | <b>54</b>   |
| SECTION 701       | Disclosure of Names and Addresses of Holders  | 54          |
| SECTION 702       | Reports by Trustee  | 54          |
| SECTION 703       | Reports by Company  | 55          |
| SECTION 704       | Company to Furnish Trustee Names and Addresses of Holders   | 55          |
| <b>ARTICLE 8</b>  | <b>CONSOLIDATION, MERGER, SALE, LEASE OR CONVEYANCE</b>   | <b>56</b>   |
| SECTION 801       | Consolidations and Mergers of Company and Sales, Leases and Conveyances Permitted Subject to Certain Conditions | 56          |
| SECTION 802       | Rights and Duties of Successor Corporation  | 56          |
| SECTION 803       | Officers' Certificate and Opinion of Counsel  | 57          |
| <b>ARTICLE 9</b>  | <b>SUPPLEMENTAL INDENTURES</b>  | <b>57</b>   |
| SECTION 901       | Supplemental Indentures Without Consent of Holders  | 57          |
| SECTION 902       | Supplemental Indentures with Consent of Holders   | 58          |
| SECTION 903       | Execution of Supplemental Indentures  | 59          |
| SECTION 904       | Effect of Supplemental Indentures   | 59          |
| SECTION 905       | Conformity with Trust Indenture Act   | 60          |
| SECTION 906       | Reference in Securities to Supplemental Indentures  | 60          |
| <b>ARTICLE 10</b> | <b>COVENANTS</b>  | <b>60</b>   |
| SECTION 1001      | Payment of Principal, Premium or Make-Whole Amount, if any; and Interest  | 60          |
| SECTION 1002      | Maintenance of Office or Agency   | 60          |
| SECTION 1003      | Money for Securities Payments to Be Held in Trust   | 62          |
| SECTION 1004      | Existence   | 63          |
| SECTION 1005      | Maintenance of Properties   | 63          |

**TABLE OF CONTENTS**  
(continued)

|              |  | Page |
|--------------|--|------|
| SECTION 1006 | Insurance  | 63   |
| SECTION 1007 | Payment of Taxes and Other Claims  | 64   |
| SECTION 1008 | Statement as to Compliance   | 64   |
| SECTION 1009 | Waiver of Certain Covenants  | 64   |
| ARTICLE 11   | REDEMPTION OF SECURITIES   | 64   |
| SECTION 1101 | Applicability of Article   | 64   |
| SECTION 1102 | Election to Redeem; Notice to Trustee  | 64   |
| SECTION 1103 | Selection by Trustee of Securities to Be Redeemed  | 65   |
| SECTION 1104 | Notice of Redemption   | 65   |
| SECTION 1105 | Deposit of Redemption Price  | 66   |
| SECTION 1106 | Securities Payable on Redemption Date  | 67   |
| SECTION 1107 | Securities Redeemed in Part  | 67   |
| ARTICLE 12   | SINKING FUNDS  | 68   |
| SECTION 1201 | Applicability of Article   | 68   |
| SECTION 1202 | Satisfaction of Sinking Fund Payments with Securities  | 68   |
| SECTION 1203 | Redemption of Securities for Sinking Fund  | 68   |
| ARTICLE 13   | REPAYMENT AT THE OPTION OF HOLDERS   | 69   |
| SECTION 1301 | Applicability of Article   | 69   |
| SECTION 1302 | Repayment of Securities  | 69   |
| SECTION 1303 | Exercise of Option   | 69   |
| SECTION 1304 | When Securities Presented for Repayment Become Due and Payable                                 | 70   |
| SECTION 1305 | Securities Repaid in Part  | 71   |
| ARTICLE 14   | DEFEASANCE AND COVENANT DEFEASANCE   | 71   |
| SECTION 1401 | Applicability of Article; Company's Option to Effect Defeasance or Covenant Defeasance         | 71   |
| SECTION 1402 | Defeasance and Discharge   | 71   |
| SECTION 1403 | Covenant Defeasance  | 72   |
| SECTION 1404 | Conditions to Defeasance or Covenant Defeasance  | 72   |
| SECTION 1405 | Deposited Money and Government Obligations to Be Held in Trust; Other Miscellaneous Provisions | 74   |

**TABLE OF CONTENTS**  
(continued)

|              |  | Page |
|--------------|--|------|
| ARTICLE 15   | MEETINGS OF HOLDERS OF SECURITIES  | 75   |
| SECTION 1501 | Purposes for Which Meetings May Be Called  | 75   |
| SECTION 1502 | Call, Notice and Place of Meetings   | 75   |
| SECTION 1503 | Persons Entitled to Vote at Meetings   | 75   |
| SECTION 1504 | Quorum; Action   | 76   |
| SECTION 1505 | Determination of Voting Rights; Conduct and Adjournment of Meetings                  | 77   |
| SECTION 1506 | Counting Votes and Recording Action of Meetings                                      | 77   |
| ARTICLE 16   | SUBORDINATION OF SECURITIES  | 78   |
| SECTION 1601 | Agreement to Subordinate   | 78   |
| SECTION 1602 | Payment Over of Proceeds upon Dissolution, Etc.                                      | 78   |
| SECTION 1603 | No Payment When Senior Indebtedness in Default                                       | 79   |
| SECTION 1604 | Reliance by Senior Indebtedness on Subordination Provisions                          | 80   |
| SECTION 1605 | Subrogation to Rights of Holders of Senior Indebtedness                              | 80   |
| SECTION 1606 | Provisions Solely to Define Relative Rights  | 81   |
| SECTION 1607 | Trustee to Effectuate Subordination  | 81   |
| SECTION 1608 | No Waiver of Subordination Provisions  | 82   |
| SECTION 1609 | Notice to Trustee  | 82   |
| SECTION 1610 | Reliance on Judicial Order or Certificate of Liquidating Agent                       | 83   |
| SECTION 1611 | Trustee Not Fiduciary for Holders of Senior Indebtedness                             | 83   |
| SECTION 1612 | Rights of Trustee as Holder of Senior Indebtedness; Preservation of Trustee's Rights | 84   |
| SECTION 1613 | Article Applicable to Paying Agents  | 84   |
| ARTICLE 17   | CONVERSION OF SECURITIES   | 84   |
| SECTION 1701 | Applicability of Article; Conversion Privilege and Conversion Price                  | 84   |
| SECTION 1702 | Exercise of Conversion Privilege   | 85   |
| SECTION 1703 | Fractions of Shares  | 86   |
| SECTION 1704 | Adjustment of Conversion Price   | 86   |
| SECTION 1705 | Notice of Adjustments of Conversion Price  | 90   |
| SECTION 1706 | Notice of Certain Corporate Action   | 90   |

**TABLE OF CONTENTS**  
(continued)

|              | <u>Page</u>  |    |
|--------------|--|----|
| SECTION 1707 | Company to Reserve Common Stock  | 90 |
| SECTION 1708 | Taxes on Conversion  | 91 |
| SECTION 1709 | Covenants as to Common Stock   | 91 |
| SECTION 1710 | Cancellation of Converted Securities   | 91 |
| SECTION 1711 | Provisions in Case of Consolidation, Merger or Sale of Assets; Special Distributions | 91 |
| SECTION 1712 | Trustee Adjustment Disclaimer; Company Determination Final                           | 92 |
| SECTION 1713 | When No Adjustment Required  | 93 |
| SECTION 1714 | Equivalent Adjustments   | 93 |

vi

---

**RHYTHM PHARMACEUTICALS, INC.**

Reconciliation and tie between the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act” or “TIA”) and the Indenture, dated as of \_\_\_\_\_, 20\_\_\_\_.

| <u>Trust Indenture Act Section</u> | <u>Indenture Section</u> |
|------------------------------------|--------------------------|
| § 310(a)(1)                        | 607                      |
| (a)(2)                             | 607                      |
| (b)                                | 607, 608                 |
| § 312(c)                           | 701                      |
| § 313(a)                           | 702                      |
| (a)                                | 702                      |
| § 314(a)                           | 703                      |
| (a)(4)                             | 1008                     |
| (c)(1)                             | 102                      |
| (c)(2)                             | 102                      |
| (b)                                | 102                      |
| § 315(b)                           | 601                      |
| § 316(a) (last sentence)           | 101 (“Outstanding”)      |
| (a)(1)(A)                          | 512                      |
| (a)(1)(B)                          | 513                      |
| (c)                                | 508                      |
| § 317(a)(1)                        | 503, 505                 |
| (a)(2)                             | 504                      |
| § 318(a)                           | 111                      |
| (d)                                | 111                      |

NOTE: This reconciliation and tie shall not, for any purpose, be deemed to be a part of the Indenture.

Attention should also be directed to Section 318(c) of the Trust Indenture Act, which provides that the provisions of Sections 310 to and including 317 of the Trust Indenture Act are a part of and govern every qualified indenture, whether or not physically contained therein.

---



(INDENTURE, dated as of \_\_\_\_\_, 20\_\_\_\_, between RHYTHM PHARMACEUTICALS, INC., a corporation organized under the laws of the Commonwealth of Massachusetts (hereinafter called the “Company”), having its principal office at 500 Boylston Street, Boston, MA 02116, and [NAME OF TRUSTEE], as Trustee hereunder (hereinafter called the “Trustee”), having a Corporate Trust Office at [\_\_\_\_\_].

## RECITALS OF THE COMPANY

The Company deems it necessary to issue from time to time for its lawful purposes subordinated debt securities (hereinafter called the “Securities”) evidencing its unsecured and subordinated indebtedness, and has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of the Securities, to be issued in one or more Series as provided in this Indenture.

This Indenture is subject to the provisions of the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act” or “TIA”), that are deemed to be incorporated into this Indenture and shall, to the extent applicable, be governed by such provisions.

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:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of a Series thereof, as follows:

## ARTICLE 1 DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

SECTION 101 Definitions. For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (1) the terms defined in this Article have the meanings assigned to them in this Article, and include the plural as well as the singular;
- (2) all other terms used herein which are defined in the TIA, either directly or by reference therein, have the meanings assigned to them therein, and the terms “cash transactions” and “self-liquidating paper,” as used in TIA Section 311, shall have the meanings assigned to them in the rules of the Commission adopted under the TIA;
- (3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with GAAP;
- (4) any reference to an “Article” or a “Section” refers to an Article or Section, as the case may be, of this Indenture; and

(5) 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.

“Act,” when used with respect to any Holder, has the meaning specified in Section 104.

“Affiliate” of any specified Person means 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” means any Person authorized by the Trustee pursuant to Section 611 hereof to act on behalf of the Trustee to authenticate Securities of one or more Series.

“Authorized Newspaper” means a newspaper, printed in the English language or in an official language of the country of publication, customarily published on each Business Day, whether or not published on Saturdays, Sundays or holidays, and of general circulation in each place in connection with which the term is used or in the financial community of each such place. Whenever successive publications are required to be made in Authorized Newspapers, the successive publications may be made in the same or in different Authorized Newspapers in the same city meeting the foregoing requirements and in each case on any Business Day.

“Bankruptcy Law” has the meaning specified in Section 501.

“Bearer Security” means any Security established pursuant to Section 301 which is payable to the bearer.

“Board of Directors” when used with reference to the Company, means the board of directors of the Company, or any committee of that board duly authorized to act hereunder, or any director or directors and/or officer or officers of the Company, to whom the board or committee shall have duly delegated its authority.

“Board Resolution” means a copy of (1) a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors or a duly authorized committee of the Board of Directors and to be in full force and effect on the date of such certification, or (2) a certificate signed by the director or directors and/or officer or officers to whom the Board of Directors shall have duly delegated its authority, together with a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification authorizing such delegation, and, in each case, delivered to the Trustee.

“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, means, unless otherwise specified with respect to any Securities issued pursuant to Section 301, any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in that Place of Payment or particular location are authorized or required by law, regulation or executive order to close.

“Capital Stock” means, with respect to any Person, any capital stock (including preferred stock), shares, interests, participations or other ownership interests (however designated) of such Person and any rights (other than debt securities convertible into or exchangeable for corporate stock), warrants or options to purchase any thereof.

“Clearstream” means Clearstream Banking Luxembourg, société anonyme, or its successor.

“Closing Price” means the closing price of a share of Common Stock of the Company as reported on the NASDAQ Global Select Market.

“Code” means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

“Commission” means the Securities and Exchange Commission, as from time to time constituted, created under the Exchange Act, or, if at any time after execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties on such date.

“Common Depository” has the meaning specified in Section 304.

“Common Stock” means, with respect to any Person, all shares of capital stock issued by such Person other than Preferred Stock.

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

“Company Request” and “Company Order” mean, respectively, a written request or order signed in the name of the Company by its Chairman of the Board, the Chief Executive Officer, the President, or a Vice President, and by its Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee.

“Constituent Person” has the meaning specified in Section 1711.

“Conversion Event” means the cessation of use of (i) a Foreign Currency both by the government of the country which issued such currency and for the settlement of transactions by a central bank or other public institutions of or within the international banking community, (ii) the ECU both within the European Monetary System and for the settlement of transactions by public institutions of or within the European Communities or (iii) any currency unit (or composite currency) other than the ECU for the purposes for which it was established.

“Conversion Price” has the meaning specified in Section 1701.

“Corporate Trust Office” means the office of the Trustee at which, at any particular time, its corporate trust business shall be principally administered, which office at the date hereof is located at [            ].

“corporation” includes corporations, associations, limited liability companies and business trusts.

“coupon” means any interest coupon appertaining to a Bearer Security.

“Covenant Defeasance” has the meaning specified in Section 1403.

“Custodian” has the meaning specified in Section 501.

“Defaulted Interest” has the meaning specified in Section 307.

“Defeasance” has the meaning specified in Section 1402.

“Distribution Record Date” has the meaning specified in Section 1711.

“Dividend Record Date” has the meaning specified in Section 1704.

“Dollar” or the sign “\$” means a dollar or other equivalent unit in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

“DTC” means The Depository Trust Company and any successor to DTC in its capacity as depository for any Securities.

“ECU” means the European Currency Unit as defined and revised from time to time by the Council of the European Communities.

“Euroclear” means Morgan Guaranty Trust Company of New York, Brussels office, or its successor, as operator of the Euroclear System.

“European Communities” means the European Economic Community, the European Coal and Steel Community and the European Atomic Energy Community.

“European Monetary System” means the European Monetary System established by the Resolution of December 5, 1978 of the Council of the European Communities.

“Event of Default” has the meaning specified in Section 501.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, as in force at the date as of which this Indenture was executed; provided, however, that in the event the Exchange Act is amended after such date, “Exchange Act” means to the extent required by any such amendment, the Exchange Act as so amended.

“Exchange Date” has the meaning specified in Section 304.

“FINRA” means the Financial Industry Regulatory Authority, Inc.

“Foreign Currency” means any currency, currency unit or composite currency, including, without limitation, the ECU issued by the government of one or more countries other than the

United States of America or by any recognized confederation or association of such governments.

“GAAP” means, except as otherwise provided herein, generally accepted accounting principles, as in effect from time to time, as used in the United States applied on a consistent basis.

“Global Security” means a Security evidencing all or a part of a series of Securities issued to and registered in the name of the depository for such series, or its nominee, in accordance with Section 305, and bearing the legend prescribed in Section 203.

“Government Obligations” means (i) securities which are (A) direct obligations of the United States of America or the government which issued the Foreign Currency in which the Securities of a particular series are payable, for the payment of which its full faith and credit is pledged or (B) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America or such government which issued the Foreign Currency in which the Securities of such series are payable, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America or such other government, which, in either case, are not callable or redeemable at the option of the issuer thereof, and (iii) a depository receipt issued by a bank or trust company as custodian with respect to any such Government Obligation or a specific payment of interest on or principal of any such 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 Government Obligation or the specific payment of interest on or principal of the Government Obligation evidenced by such depository receipt.

“Guaranty” by any Person means any Obligation, contingent or otherwise, of such Person guaranteeing any Indebtedness of any other Person (the “primary obligor”) in any manner, whether directly or indirectly, and including, without limitation, every Obligation of such Person (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or to purchase (or to advance or supply funds for the purchase of) any security for the payment of such Indebtedness, (ii) to purchase property, securities or services for the purpose of assuring the holder of such Indebtedness of the payment of such Indebtedness or (iii) to maintain working capital, equity capital or other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness; provided, however, that a Guaranty by any Person shall not include endorsements by such Person for collection or deposit, in either case in the ordinary course of business. The terms “Guaranteed,” “Guaranteeing” and “Guarantor” shall have meanings correlative to the foregoing.

“Holder” means, in the case of a Registered Security, the Person in whose name a Security is registered in the Security Register and, in the case of a Bearer Security, the bearer thereof and, when used with respect to any coupon, shall mean the bearer thereof.

“Indebtedness” means, with respect to any Person, without duplication, (i) any Obligation of such Person relating to any indebtedness of such Person (A) for borrowed money (whether or

not the recourse of the lender is to the whole of the assets, of such person or only to a portion thereof), (B) evidenced by notes, debentures or similar instruments (including purchase money obligations) given in connection with the acquisition of any property or assets (other than trade accounts payable for inventory or similar property acquired in the ordinary course of business), including securities, for the payment of which such Person is liable, directly or indirectly, or the payment of which is secured by a lien, charge or encumbrance on property or assets of such Person, (C) for goods, materials or services purchased in the ordinary course of business (other than trade accounts payable arising in the ordinary course of business), (D) with respect to letters of credit or bankers acceptances issued for the account of such Person or performance, surety or similar bonds, (E) for the payment of money relating to a capitalized lease Obligation or (F) under interest rate swaps, caps or similar agreements and foreign exchange contracts, currency swaps or similar agreements; (ii) any liability of others of the kind described in the preceding clause (i), which such Person has Guaranteed or which is otherwise its legal liability; and (iii) any and all deferrals, renewals, extensions and refunding of, or amendments, modifications or supplements to, any liability of the kind described in any of the preceding clauses (i) or (ii).

“Indenture” means this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, and shall include the terms of particular series of Securities established as contemplated by Section 301; provided, however, that, if at any time more than one Person is acting as Trustee under this instrument, “Indenture” shall mean, with respect to any one or more series of Securities for which such Person is Trustee, this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of the or those particular series of Securities for which such Person is Trustee established as contemplated by Section 301, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is Trustee, regardless of when such terms or provisions were adopted, and exclusive of any provisions or terms adopted by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee but to which such Person, as such Trustee, was not a party.

“Indexed Security” means a Security the terms of which provide that the principal amount thereof payable at Stated Maturity may be more or less than the principal face amount thereof at original issuance.

“Interest,” when used with respect to an Original Issue Discount Security which by its terms bears interest only after Maturity, shall mean interest payable after Maturity.

“Interest Payment Date,” when used with respect to any Security, means the Stated Maturity of an installment of interest on such Security.

“Make-Whole Amount,” when used with respect to any Security, means the amount, if any, in addition to principal (and accrued interest thereon, if any) which is required by a Security, under the terms and conditions specified therein or as otherwise specified as contemplated by Section 301, to be paid by the Company to the Holder thereof in connection with any optional redemption or accelerated payment of such Security.

“mandatory sinking fund payment” has the meaning specified in Section 1201.

“Market Value of the Distribution” has the meaning specified in Section 1704.

“Maturity,” when used with respect to any Security, means the date on which the principal (or, if the context so requires, in the case of an Original Issue Discount Security, or lesser amount or, in the case of an Indexed Security, an amount determined in accordance with the specified terms of that Security) of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, notice of redemption, notice of option to elect repayment or otherwise.

“Obligation” of any Person with respect to any specified Indebtedness means any obligation of such Person to pay principal, premium, interest (including interest accruing on or after the filing of any petition in bankruptcy or for reorganization relating to such Person, whether or not a claim for such post-petition interest is allowed in such proceeding), penalties, reimbursement or indemnification amounts, fees, expenses or other amounts relating to such Indebtedness.

“Officers Certificate” means a certificate signed by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or a Vice President (whether or not designated by a number or word or words added before or after the title “Vice President”), and by the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary of the Company, and delivered to the Trustee.

“Opinion of Counsel” means a written opinion of counsel, who may be counsel for the Company or who may be an employee of or other counsel for the Company.

“optional sinking fund payment” has the meaning specified in Section 1201.

“Original Issue Discount Security” means any Security which provides for an amount (excluding any amounts attributable to accrued but unpaid interest thereon) less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 502.

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

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

(ii) Securities, or portions thereof, for whose payment or redemption (including repayment at the option of the Holder) 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 and any coupons appertaining thereto; provided, however, that, if such Securities 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;

(iii) Securities, except to the extent provided in Sections 1402 and 1403, with respect to which the Company has effected Defeasance and/or Covenant Defeasance as provided in Article Fourteen; and

(iv) Securities which have been paid pursuant to Section 306 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 the Trustee proof satisfactory to it that such Securities are held by a bona fide 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 the Outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder or are present at a meeting of Holders for quorum purposes, and for the purpose of making the calculations required by TIA Section 313, (i) the principal amount of an Original Issue Discount Security that may be counted in making such determination or calculation and that shall be deemed to be Outstanding for such purpose shall be equal to the amount of principal thereof that would be (or shall have been declared to be) due and payable, at the time of such determination, upon a declaration of acceleration of the maturity thereof pursuant to Section 502, (ii) the principal amount of any Security denominated in a Foreign Currency that may be counted in making such determination or calculation and that shall be deemed Outstanding for such purpose shall be equal to the Dollar equivalent, determined pursuant to Section 301 as of the date such Security is originally issued by the Company, of the principal amount (or, in the case of an Original Issue Discount Security, the Dollar equivalent as of such date of original issuance of the amount determined as provided in clause (i) above) of such Security, (iii) the principal amount of any Indexed Security that may be counted in making such determination or calculation and that shall be deemed outstanding for such purpose shall be equal to the principal face amount of such Indexed Security at original issuance, unless otherwise provided with respect to such Security pursuant to Section 301, and (iv) Securities owned by the Company or any other obligor upon the Securities 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 making such calculation or in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities which a Responsible Officer of the Trustee actually knows to be so owned shall be so disregarded. Securities owned as provided in clause (iv) above which 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 so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor. In case of a dispute as to such right, the advice of counsel shall be full protection in respect of any decision made by the Trustee in accordance with such advice.

“Paying Agent” means any Person authorized by the Company to pay the principal of (and premium or Make-Whole Amount, if any) or interest on any Securities or coupons on behalf of the Company.

“Payment Blockage Notice” and “Payment Blockage Period” have the respective meanings specified in Section 1603.



“Person” means any individual, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof, or any other entity or organization.

“Place of Payment,” when used with respect to the Securities of or within any series, means the place or places where the principal of (and premium or Make-Whole Amount, if any) and interest on such Securities are payable as specified as contemplated by Sections 301 and 1002.

“Predecessor Security” of any particular Security means 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 306 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security or a Security to which a mutilated, destroyed, lost or stolen coupon appertains shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security or the Security to which the mutilated, destroyed, lost or stolen coupon appertains.

“Preferred Stock” means, with respect to any Person, all capital stock issued by such Person that is entitled to a preference or priority over any other capital stock issued by such Person with respect to any distribution of such Person’s assets, whether by dividend or upon any voluntary or involuntary liquidation, dissolution or winding up.

“Proceeding” has the meaning specified in Section 1602.

“Redemption Date,” when used with respect to any Security to be redeemed, in whole or in part, means the date fixed for such redemption by or pursuant to this Indenture.

“Redemption Price,” when used with respect to any Security to be redeemed, means the price specified in the related Officers’ Certificate or supplemental indenture contemplated by and pursuant to Section 301, at which it is to be redeemed pursuant to this Indenture.

“Reference Date” has the meaning specified in Section 1704.

“Registered Security” shall mean any Security which is registered in the Security Register.

“Regular Record Date” for the interest payable on any Interest Payment Date on the Registered Securities of or within any series means the date specified for that purpose as contemplated by Section 301, whether or not a Business Day.

“Repayment Date” means, when used with respect to any Security to be repaid at the option of the Holder, the date fixed for such repayment by or pursuant to this Indenture.

“Repayment Price” means, when used with respect to any Security to be repaid at the option of the Holder, the price at which it is to be repaid by or pursuant to this Indenture.

“Responsible Officer,” when used with respect to the Trustee, means any Vice President (whether or not designated by a number or a word or words added before or after the title “Vice

President”), Assistant Vice President, Trust Officer or Assistant Trust Officer working in its Corporate Trust Department, or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and working in its Corporate Trust Department, and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of such officer’s knowledge and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

“Rights” has the meaning specified in Section 1704.

“Rights Record Date” has the meaning specified in Section 1704.

“Securities Payment” has the meaning specified in Section 1602.

“Security” and “Securities” has the meaning stated in the first recital of this Indenture and, more particularly, means any Security or Securities authenticated and delivered under this Indenture; provided, however, that, if at any time there is more than one Person acting as Trustee under this Indenture, “Securities” with respect to the Indenture as to which such Person is Trustee shall have the meaning stated in the first recital of this Indenture and shall more particularly mean Securities authenticated and delivered under this Indenture, exclusive, however, of Securities of any series as to which such Person is not Trustee.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 305.

“Senior Indebtedness” means Indebtedness of the Company, whether outstanding on the date of this Indenture or thereafter created, incurred, assumed or guaranteed by the Company, other than the following: (1) any Indebtedness as to which, in the instrument evidencing such Indebtedness or pursuant to which such Indebtedness was issued, it is expressly provided that such Indebtedness is subordinate in right of payment to all Indebtedness of the Company not expressly subordinated to such Indebtedness; (2) any Indebtedness which by its terms refers explicitly to the Securities and states that such Indebtedness shall not be senior, shall be pari passu or shall be subordinated in right of payment to the Securities; and (3) with respect to any series of Securities, any Indebtedness of the Company evidenced by Securities of the same or of another series. Notwithstanding anything to the contrary in the foregoing, Senior Indebtedness shall not include: (a) Indebtedness of or amounts owed by the Company for compensation to employees, or for goods, materials or services purchased in the ordinary course of business, or (b) Indebtedness of the Company to a Subsidiary of the Company.

A “Series” of Securities means all securities denoted as part of the same series authorized by or pursuant to a particular Board Resolution.

“Short Term Rights” has the meaning specified in Section 1704.

“Significant Subsidiary” means any Subsidiary which is a “significant subsidiary” (as defined in Article I, Rule 1-02 of Regulation S-X, promulgated under the Securities Act of 1933, as amended) of the Company.

11

---

“Special Record Date” for the payment of any Defaulted Interest on the Registered Securities of or within any series means a date fixed by the Company pursuant to Section 307.

“Stated Maturity,” when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security or a coupon representing such installment of interest as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“Subsidiary” means, with respect to any Person, any corporation, limited liability company, partnership or other entity of which a majority of (i) the voting power of the voting equity securities or (ii) the outstanding equity interests are owned, directly or indirectly, by such Person. For the purposes of this definition, “voting equity securities” means equity securities having voting power for the election of directors, whether at all times or only so long as no senior class of security has such voting power by reason of any contingency.

“Trading Day” means any day on which the NASDAQ Global Select Market is open for business.

“Trigger Events” has the meaning specified in Section 1704.

“Trust Indenture Act” or “TIA” means the Trust Indenture Act of 1939, as amended and as in force at the date as of which this Indenture was executed, except as provided in Section 905.

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

“Unadjusted Distribution” has the meaning specified in Section 1704.

“United States” means, unless otherwise specified with respect to any Securities pursuant to Section 301, the United States of America (including the states and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction.

“United States Person” means, unless otherwise specified with respect to any Securities pursuant to Section 301, an individual who is a citizen or resident of the United States, a corporation, partnership or other entity created or organized in or under the laws of the United States or an estate or trust the income of which is subject to United States Federal income taxation regardless of its source.

“Yield to Maturity” means the yield to maturity, computed at the time of issuance of a Security (or, if applicable, at the most recent redetermination of interest on such Security) and as set forth in such Security in accordance with generally accepted United States bond yield computation principles.

12



SECTION 102 Compliance Certificates and Opinions. Upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee an Officers' 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, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (including certificates delivered pursuant to Section 1008) shall include:

- (1) a statement that each individual signing such certificate or opinion has read such condition or covenant and the definitions herein relating thereto;
- (2) 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;
- (3) a statement that, in the opinion of each such individual, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such condition or covenant has been complied with; and
- (4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

SECTION 103 Form of Documents Delivered to Trustee. 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.

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

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 104 Acts of Holders.

(a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of the Outstanding Securities of all series or one or more series, as the case may be, may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by agents duly appointed in writing. If Securities of a series are issuable as Bearer Securities, any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of Securities of such series may, alternatively, be embodied in and evidenced by the record of Holders of Securities of such series voting in favor thereof, either in person or by proxies duly appointed in writing, at any meeting of Holders of Securities of such series duly called and held in accordance with the provisions of Article Fifteen, or a combination of such instruments and any such record. Except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments or record or both are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments and any such record (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments or so voting at any such meeting. Proof of execution of any such instrument or of a writing appointing any such agent, or of the holding by any Person of a Security, shall be sufficient for any purpose of this Indenture and conclusive in favor of the Trustee and the Company and any agent of the Trustee or the Company, if made in the manner provided in this Section. The record of any meeting of Holders of Securities shall be proved in the manner provided in Section 1506.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of his authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other reasonable manner which the Trustee deems sufficient.

(c) The ownership of Registered Securities shall be proved by the Security Register. As to any matter relating to beneficial ownership interests in any Global Security, the appropriate depository's records shall be dispositive for purposes of this Indenture.

(d) The ownership of Bearer Securities may be proved by the production of such Bearer Securities or by a certificate executed, as depository, by any trust company, bank, banker or other depository, wherever situated, if such certificate shall be deemed by the Trustee to be satisfactory, showing that at the date therein mentioned such Person had on deposit with such depository, or exhibited to it, the Bearer Securities therein described; or such facts may be

proved by the certificate or affidavit of the Person holding such Bearer Securities, if such certificate or affidavit is deemed by the Trustee to be satisfactory. The Trustee and the Company may assume that such ownership of any Bearer Security continues until (1) another certificate or affidavit bearing a later date issued in respect of the same Bearer Security is produced, or (2) such Bearer Security is produced to the Trustee by some other Person, or (3) such Bearer Security is surrendered in exchange for a Registered Security, or (4) such Bearer Security is no longer Outstanding. The ownership of Bearer Securities may also be proved in any other manner which the Trustee deems sufficient.

(e) If the Company shall solicit from the Holders of Registered Securities any request, demand, authorization, direction, notice, consent, waiver or other Act, the Company may, at its option, in or pursuant to a Board Resolution, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other Act, but the Company shall have no obligation to do so. Notwithstanding TIA Section 316(c), such record date shall be the record date specified in or pursuant to such Board Resolution, which shall be a date not earlier than the date 30 days prior to the first solicitation of Holders generally in connection therewith and not later than the date such solicitation is completed. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other Act may be given before or after such record date, but only the Holders of record at the close of business on such record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of Outstanding Securities have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other Act, and for that purpose the Outstanding Securities shall be computed as of such record date; provided that no such authorization, agreement or consent by the Holders on such record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than eleven months after the record date.

(f) Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or upon the conversion thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee, any Security Registrar, any Paying Agent, any Authenticating Agent or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

SECTION 105 Notices, etc., to Trustee and Company. Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing to or with the Trustee at [ ] or at any other address previously furnished in writing to the Company by the Trustee, Attention: [ ]; or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-

class postage prepaid, to the Company addressed to it at the address of its principal office specified in the first paragraph of this Indenture or at any other address previously furnished in writing to the Trustee by the Company, Attention: [\_\_\_\_\_]; or

(3) either the Trustee or the Company, by the other party or by any Holder, shall be sufficient for every purpose hereunder if given by facsimile transmission, receipt confirmed by telephone followed by an original copy delivered by guaranteed overnight courier; if to the Trustee at facsimile number [\_\_\_\_\_]; and if to the Company at facsimile number [\_\_\_\_\_].

SECTION 106 Notice to Holders; Waiver. Where this Indenture provides for notice of any event to Holders of Registered Securities by the Company or the Trustee, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each such Holder affected by such event, at his address as it appears in the Security Register, not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. In any case where notice to Holders of Registered Securities 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 of Registered Securities or the sufficiency of any notice to Holders of Bearer Securities given as provided herein. Any notice mailed to a Holder in the manner herein prescribed shall be conclusively deemed to have been received by such Holder, whether or not such Holder actually receives such notice.

If by reason of the suspension of or irregularities in regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification to Holders of Registered Securities as shall be made with the approval of the Trustee shall constitute a sufficient notification to such Holders for every purpose hereunder.

Except as otherwise expressly provided herein or otherwise specified with respect to any Securities pursuant to Section 301, where this Indenture provides for notice to Holders of Bearer Securities of any event, such notice shall be sufficiently given if published in an Authorized Newspaper in The City of New York and in such other city or cities as may be specified in such Securities on a Business Day, such publication to be not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once, on the date of the first such publication.

If by reason of the suspension of publication of any Authorized Newspaper or Authorized Newspapers or by reason of any other cause it shall be impracticable to publish any notice to Holders of Bearer Securities as provided above, then such notification to Holders of Bearer Securities as shall be given with the approval of the Trustee shall constitute sufficient notice to such Holders for every purpose hereunder. Neither the failure to give notice by publication to any particular Holder of Bearer Securities as provided above, nor any defect in any notice so published, shall affect the sufficiency of such notice with respect to other Holders of Bearer Securities or the sufficiency of any notice to Holders of Registered Securities given as provided herein.

Any request, demand, authorization, direction, notice, consent or waiver required or permitted under this Indenture shall be in the English language, except that any published notice may be in an official language of the country of publication.

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 upon such waiver.

SECTION 107 Counterparts; Effect of Headings and Table of Contents. 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 Indenture. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

SECTION 108 Successors and Assigns. All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

SECTION 109 Severability Clause. In case any provision in this Indenture or in any Security or coupon shall be held invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 110 Benefits of Indenture. Nothing in this Indenture or in the Securities or coupons, if any, express or implied, shall give to any Person, other than the parties hereto, any Security Registrar, any Paying Agent, any Authenticating Agent and their successors hereunder and the Holders any benefit or any legal or equitable right, remedy or claim under this Indenture.

SECTION 111 Governing Law. This Indenture and the Securities and coupons shall be governed by and construed in accordance with the laws of the State of New York. This Indenture is subject to the provisions of the TIA that are required to be part of this Indenture and shall, to the extent applicable, be governed by such provisions.

SECTION 112 Legal Holidays. In any case where any Interest Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity of any Security or the last date on which a Holder has the right to convert or exchange a Security shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or any Security or coupon other than a provision in the Securities of any series which specifically states that such provision shall apply in lieu hereof), payment of interest or principal (and premium or Make-Whole Amount, if any) or conversion or exchange of such Security need not be made at such Place of Payment on such date, but (except as otherwise provided in the supplemental indenture with respect to such Security) may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date, Redemption Date, Repayment Date or sinking fund payment date, or at the Stated Maturity or Maturity, or on such last day for conversion or exchange, provided that no interest shall accrue on the amount so payable for the period from and after such Interest



Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity, as the case may be.

SECTION 113 Limited Liability; Immunity of Stockholders, Directors, Officers and Agents of the Company. Notwithstanding any other provision of this Indenture or of the Securities of any series to the contrary, no recourse under or upon any obligation, covenant or agreement contained in this Indenture or in any Security, or for the payment of any sums due on account of any indebtedness evidenced thereby, including without limitation principal, premium or interest, if any, or for any claim based on this Indenture or any Security or otherwise in respect of this Indenture or any Security, shall be had, whether by levy or execution or otherwise, against (i) the Company, the Company's assets or against any past, present or future stockholder, employee, officer, director or agent, as such, of the Company or any successor, either directly or through the Company or any successor, under any rule of law, statute, constitutional provision or by the enforcement of any assessment or penalty, or by any legal or equitable proceeding or otherwise, nor shall any such parties be personally liable for any such amounts, obligations or claims, or liable for any deficiency judgment based thereon or with respect thereto, it being expressly understood that the sole remedies hereunder or under any other document with respect to the Securities against such parties with respect to such amounts, obligations or claims shall be against the Company and that all such liability of and recourse against such parties is expressly waived and released by the acceptance of the Securities by the Holders and as part of the consideration for the issue of the Securities.

SECTION 114 Conflict with Trust Indenture Act. If any provision hereof limits, qualifies or conflicts with another provision hereof which is required or deemed to be included in this Indenture by any of the provisions of the Trust Indenture Act, such required provision shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act that may be so modified or excluded, the latter provision shall be deemed to apply to this Indenture as so modified or to be excluded, as the case may be.

## ARTICLE 2 SECURITIES FORMS

SECTION 201 Forms of Securities. The Registered Securities, if any, of each series and the Bearer Securities, if any, of each series and related coupons shall be substantially in the form of Exhibit A hereto or in such other form as shall be established in one or more indentures supplemental hereto or approved from time to time by or pursuant to a Board Resolution in accordance with Section 301, shall have such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture or any indenture supplemental hereto, 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 over-the-counter market or securities exchange, on which the Securities may be quoted or listed, or to conform to usage.

Unless otherwise specified as contemplated by Section 301, Bearer Securities shall have interest coupons attached.

The definitive Securities and coupons shall be printed, lithographed or engraved or produced by any combination of these methods on a steel engraved border or steel engraved borders or mechanically reproduced on safety paper or may be produced in any other manner, all as determined by the officers executing such Securities or coupons, as evidenced by their execution of such Securities or coupons.

SECTION 202 Form of Trustee's Certificate of Authentication. Subject to Section 611, the Trustee's certificate of authentication shall be in substantially the following form:

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

[NAME OF TRUSTEE], as Trustee

By:

\_\_\_\_\_  
Authorized Signatory

Dated: \_\_\_\_\_

SECTION 203 Securities Issuable in Global Form. If Securities of or within a series are issuable in the form of one or more Global Securities, then, notwithstanding clause (8) of Section 301 and the provisions of Section 302, any such Global Security or Securities may provide that it or they shall represent the aggregate amount of all Outstanding Securities of such series (or such lesser amount as is permitted by the terms thereof) from time to time endorsed thereon and may also provide that the aggregate amount of Outstanding Securities of such series represented thereby may from time to time be increased or decreased to reflect exchanges. Any endorsement of any Global Security to reflect the amount, or any increase or decrease in the amount, or changes in the rights of Holders thereof, of Outstanding Securities represented thereby shall be made (or caused to be made) by the Trustee in such manner or by such Person or Persons as shall be specified therein or in the Company Order to be delivered to the Trustee pursuant to Section 303 or 304. Subject to the provisions of Section 303 and, if applicable, Section 304, the Trustee shall deliver and redeliver any Global Security in permanent global form in the manner and upon instructions given by the Person or Persons specified therein or in the applicable Company Order. If a Company Order pursuant to Section 303 or 304 has been, or simultaneously is, delivered, any instructions by the Company with respect to endorsement or delivery or redelivery of a Global Security shall be in writing but need not comply with Section 102 and need not be accompanied by an Opinion of Counsel.

The provisions of the last sentence of Section 303 shall apply to any Security represented by a Global Security if such Security was never issued and sold by the Company and the Company delivers to the Trustee the Global Security together with written instructions (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) with regard to the reduction in the principal amount of Securities represented thereby, together with the written statement contemplated by the last sentence of Section 303.

Notwithstanding the provisions of Section 307, unless otherwise specified as contemplated by Section 301, payment of principal of and any premium or Make-Whole Amount, if any, and

interest on any Global Security in permanent global form shall be made to the registered Holder thereof.

Notwithstanding the provisions of Section 308 and except as provided in the preceding paragraph, the Company, the Trustee and any agent of the Company and the Trustee shall treat as the Holder of such principal amount of Outstanding Securities represented by a permanent Global Security (i) in the case of a permanent Global Security in registered form, the Holder of such permanent Global Security in registered form, or (ii) in the case of a permanent Global Security in bearer form, Euroclear or Clearstream.

Any Global Security authenticated and delivered hereunder shall bear a legend in substantially the following form:

“This Security is a Global Security within the meaning set forth in the Indenture hereinafter referred to and is registered in the name of a Depository or a nominee of a Depository. This Security is exchangeable for Securities registered in the name of a person other than the Depository or its nominee only in the limited circumstances described in the Indenture, and 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 its nominee to a successor Depository or its nominee.”

### ARTICLE 3 THE SECURITIES

SECTION 301 Amount Unlimited; Issuable in Series. The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series, each of which shall be authorized pursuant to Board Resolutions of the Company. There shall be established in one or more Board Resolutions or pursuant to authority granted by one or more Board Resolutions and, subject to Section 303, set forth in an Officers' Certificate, or established in one or more indentures supplemental hereto, prior to the issuance of Securities of any series:

- (1) The title of the Securities of the series, including “CUSIP” numbers (which shall distinguish the Securities of such series from all other series of Securities);
- (2) 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 authenticated and delivered upon registration of transfer of, or upon conversion of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 304, 305, 306, 906, 1107, 1305 or 1702) and the minimum authorized denominations with respect to the Securities of such series;
- (3) The price (expressed as a percentage of the principal amount thereof) at which such Securities will be issued and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or (if applicable) the portion of the principal amount of such Securities that is convertible into Common Stock or the method by which any such portion shall be determined.

20

- 
- (4) If convertible, the terms on which such Securities are convertible, including the initial conversion price or rate and the conversion period and any applicable limitations on the ownership or transferability of Common Stock or Preferred Stock receivable on conversion;
  - (5) The date or dates, or the method for determining such date or dates, on which the principal of such Securities will be payable;
  - (6) The rate or rates (which may be fixed or variable), or the method by which such rate or rates shall be determined, at which such Securities will bear interest, if any;
  - (7) The date or dates, or the method for determining such date or dates, from which any such interest will accrue, the Interest Payment Dates on which any such interest will be payable, the Regular Record Dates for such Interest Payment Dates, or the method by which such dates shall be determined, the Persons to whom such interest shall be payable, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months;
  - (8) The Make-Whole Amount, if any, or method for determining the Make-Whole Amount, if any, payable with respect to such Securities, and the terms upon which such amount, if any, will be payable;
  - (9) The place or places where the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities will be payable, where such Securities may be surrendered for registration of transfer or conversion or exchange and where notices or demands to or upon the Company in respect of such Securities and this Indenture may be served;
  - (10) The period or periods, if any, within which, the price or prices at which and the other terms and conditions upon which such Securities may, pursuant to any optional or mandatory redemption provisions, be redeemed, as a whole or in part, at the option of the Company;
  - (11) The obligation, if any, of the Company to redeem, repay or purchase such Securities pursuant to any sinking fund or analogous provision or at the option of a Holder thereof, and the period or periods within which, the price or prices at which and the other terms and conditions upon which such Securities will be redeemed, repaid or purchased, as a whole or in part, pursuant to such obligation;
  - (12) If other than Dollars, the currency or currencies in which such Securities are denominated and payable, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies, the manner of determining the equivalent thereof in Dollars for purposes of the definition of “Outstanding” in Section 101, and the terms and conditions relating thereto;
  - (13) Whether the amount of payments of principal of (and premium or Make-Whole Amount, if any, including any amount due upon redemption, if any) or interest on such Securities may be determined with reference to an index, formula or other method (which index, formula or method may, but need not be, based on the yield on or trading price of other



securities, including United States Treasury securities or on a currency, currencies, currency unit or units, or composite currency or currencies) and the manner in which such amounts shall be determined;

(14) Whether the principal of (and premium or Make-Whole Amount, if any) or interest on the Securities of the series are to be payable, at the election of the Company or a Holder thereof, in a currency or currencies, currency unit or units or composite currency or currencies other than that in which such Securities are denominated or stated to be payable, the period or periods within which, and the terms and conditions upon which, such election may be made, and the time and manner of, and identity of the exchange rate agent with responsibility for, determining the exchange rate between the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are denominated or stated to be payable and the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are to be so payable;

(15) Provisions, if any, granting special rights to the Holders of Securities of the series upon the occurrence of such events as may be specified;

(16) Any deletions from, modifications of or additions to the Events of Default or covenants of the Company with respect to Securities of the series, whether or not such Events of Default or covenants are consistent with the Events of Default or covenants set forth herein;

(17) Whether and under what circumstances the Company will pay any additional amounts on such Securities in respect of any tax, assessment or governmental charge and, if so, whether the Company will have the option to redeem such Securities in lieu of making such payment;

(18) Whether Securities of the series are to be issuable as Registered Securities, Bearer Securities (with or without coupons) or both, any restrictions applicable to the offer, sale or delivery of Bearer Securities and the terms upon which Bearer Securities of the series may be exchanged for Registered Securities of the series and vice versa (if permitted by applicable laws and regulations), whether any Securities of the series are to be issuable initially in temporary global form and whether any Securities of the series are to be issuable in permanent global form with or without coupons and, if so, whether beneficial owners of interests in any such permanent global Security may, or shall be required to, exchange such interests for Securities of such series and of like tenor of any authorized form and denomination and the circumstances under which any such exchanges may, or shall be required to, occur, if other than in the manner provided in the Indenture, and, if Registered Securities of the series are to be issuable as a Global Security, the identity of the depository for such series;

(19) The date as of which any Bearer Securities of the series and any temporary Global Security representing outstanding Securities of the series shall be dated if other than the date of original issuance of the first Security of the series to be issued;

(20) The Person to whom any interest on any Registered Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such

interest the manner in which, or the Person to whom, any interest on any Bearer Security of the series shall be payable, if otherwise than upon presentation and surrender of the coupons appertaining thereto as they severally mature, and the extent to which, or the manner in which, any interest payable on a temporary Global Security on an Interest Payment Date will be paid if other than in the manner provided herein; provided, however, in each case, that the manner of determining such Person or making such payment shall be acceptable to the Trustee (as not imposing on it any undue administrative burden or risk of liability);

(21) The applicability, if any, of the Defeasance and Covenant Defeasance provisions of Article Fourteen hereof to the Securities of the series;

(22) The obligation, if any, of the Company to permit the conversion of the Securities of such series into Common Stock or Preferred Stock, as the case may be, and the terms and conditions upon which such conversion shall be effected (including, without limitation, the initial conversion price or rate, the conversion period, any adjustment of the applicable conversion price and any requirements relative to the reservation of such shares for purposes of conversion);

(23) If the Securities of such series are to be issuable in definitive form (whether upon original issue or upon exchange of a temporary Security of such series) only upon receipt of certain certificates or other documents or satisfaction of other conditions, then the form and/or terms of such certificates, documents or conditions;

(24) Designation of the Trustee, if different from the Trustee under the Indenture, with respect to such series and the terms applicable to such Trustee (which shall be accepted by such Trustee by its execution and delivery of a supplemental indenture as provided therein); and

(25) Any other terms of the series (which terms shall not be inconsistent with the provisions of this Indenture).

All Securities of any one series and the coupons appertaining to any Bearer Securities of such series shall be substantially identical except, in the case of Registered Securities, as to denomination and except as may otherwise be provided in or pursuant to such Board Resolution (subject to Section 303) and set forth in such Officers' Certificate or in any such indenture supplemental hereto. All Securities of any one series need not be issued at the same time and, unless otherwise provided, a series may be reopened, without the consent of the Holders, for issuances of additional Securities of such series.

If any of the terms of the Securities of any series are established by action taken pursuant to one or more Board Resolutions, a copy of an appropriate record of such action(s) shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officers' Certificate setting forth the terms of the Securities of such series.

SECTION 302 Denominations. The Securities of each series shall be issuable in such denominations as shall be specified as contemplated by Section 301. With respect to Securities of any series denominated in Dollars, in the absence of any such provisions with respect to the Securities of any series, the Securities of such series, other than Global Securities (which may be

of any denomination), shall be issuable in denominations of \$1,000 and any integral multiple thereof or the equivalent amounts thereof in the case of Securities denominated in the Foreign Currency or currency unit.

**SECTION 303 Execution, Authentication, Delivery and Dating.** The Securities and any coupons appertaining thereto shall be executed on behalf of the Company by its Chairman of the Board, its Chief Executive Officer, its President, or one of its Vice Presidents, under its corporate seal reproduced thereon, and attested by its Secretary or one of its Assistant Secretaries. The signature of any of these officers on the Securities and coupons may be manual or facsimile signatures of the present or any future such authorized officer and may be imprinted or otherwise reproduced on the Securities.

Securities and coupons bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities or coupons.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series, together with any coupon appertaining thereto, executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities (accompanied by a copy of the Board Resolution and the Officers' Certificate or supplemental indenture contemplated by Section 301), and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities; provided, however, that, in connection with its original issuance, no Bearer Security shall be mailed or otherwise delivered to any location in the United States; and provided further that, unless otherwise specified with respect to any series of Securities pursuant to Section 301, a Bearer Security may be delivered in connection with its original issuance only if the Person entitled to receive such Bearer Security shall have furnished a certificate to Euroclear or Clearstream, as the case may be, in the form set forth in Exhibit B-1 to this Indenture or such other certificate as may be specified by the Company with respect to any series of Securities pursuant to Section 301, dated no earlier than 15 days prior to the earlier of the date on which such Bearer Security is delivered and the date on which any temporary Security first becomes exchangeable for such Bearer Security in accordance with the terms of such temporary Security and this Indenture. If any Security shall be represented by a permanent Global Security, then, for purposes of this Section and Section 304, the notation of a beneficial owner's interest therein upon original issuance of such Security or upon exchange of a portion of a temporary Global Security shall be deemed to be delivery in connection with its original issuance of such beneficial owner's interest in such permanent Global Security. Except as permitted by Section 306, the Trustee shall not authenticate and deliver any Bearer Security unless all appurtenant coupons for interest then matured have been detached and canceled.

If all the Securities of any series are not to be issued at one time and if the Board Resolution or supplemental indenture establishing such series shall so permit, such Company Order may set forth procedures acceptable to the Trustee for the issuance of such Securities and determining the terms of particular Securities of such series, such as interest rate or formula, maturity date, date of issuance and date from which interest shall accrue. In authenticating such Securities, and accepting the additional responsibilities under this Indenture in relation to such

Securities, the Trustee shall be entitled to receive, and (subject to TIA Section 315(a) through 315(d)) shall be fully protected in relying upon, (i) an Opinion of Counsel stating that

- (a) the form or forms of such Securities and any coupons have been established in conformity with the provisions of this Indenture;
- (b) the terms of such Securities and any coupons have been established in conformity with the provisions of this Indenture; and
- (c) such Securities, together with any coupons appertaining thereto, when completed by appropriate insertions and executed and delivered by the Company to the Trustee for authentication in accordance with this Indenture, authenticated and delivered by the Trustee in accordance with this Indenture and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute legal, valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization and other similar laws of general applicability relating to or affecting the enforcement of creditors' rights generally and to general equitable principles; and

(ii) an Officers' Certificate stating that all conditions precedent provided for in this Indenture relating to the issuance of the Securities have been complied with and that, to the best of the knowledge of the signers of such certificate, that no Event of Default with respect to any of the Securities shall have occurred and be continuing.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities (or to enter into the related supplemental indenture, if applicable) if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties, obligations or immunities under the Securities and this Indenture or otherwise in a manner which is not reasonably acceptable to the Trustee.

Notwithstanding the provisions of Section 301 and of the preceding paragraph, if all the Securities of any series are not to be issued at one time, it shall not be necessary to deliver an Officers' Certificate otherwise required pursuant to Section 301 or a Company Order, or an Opinion of Counsel or an Officers' Certificate otherwise required pursuant to the preceding paragraph at the time of issuance of each Security of such series, but such order, opinion and certificates, with appropriate modifications to cover such future issuances, shall be delivered at or before the time of issuance of the first Security of such series.

Each Registered Security shall be dated the date of its authentication and each Bearer Security shall be dated as of the date specified as contemplated by Section 301.

No Security or coupon shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security or Security to which such coupon appertains a certificate of authentication substantially in the form provided for herein duly executed by the Trustee (subject to Section 611) by manual signature of an authorized signatory, 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. Notwithstanding the foregoing, if any Security (including a



Global Security) shall have been authenticated and delivered hereunder but never issued and sold by the Company, and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 309 together with a written statement (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) stating that such Security has never been issued and sold by the Company, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

SECTION 304 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 which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued, in registered form, or, if authorized, in bearer form with one or more coupons or without coupons, 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. In the case of Securities of any series, such temporary Securities may be in global form.

Except in the case of temporary Global Securities (which shall be exchanged as otherwise provided herein or as otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301), if temporary Securities of any series are issued, the Company will cause definitive Securities of that 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 the temporary Securities of such series at the office or agency of the Company in a Place of Payment for that series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series (accompanied by any non-matured coupons appertaining thereto), the Company shall execute (in accordance with a Company Order delivered at or prior to the authentication of the first definitive security to such series) and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations; provided, however, that no definitive Bearer Security shall be delivered in exchange for a temporary Registered Security; and provided further that a definitive Bearer Security shall be delivered in exchange for a temporary Bearer Security only in compliance with the conditions set forth in Section 305. 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.

(b) Unless otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301, the following provisions of this Section 304(b) shall govern the exchange of temporary Securities other than through the facilities of the DTC. If any such temporary Security is issued in global form, then such temporary Global Security shall, unless otherwise provided therein, be delivered to the London office of a depository or common depository upon and pursuant to written direction of the Company (the "Common Depository"), for the benefit of Euroclear and Clearstream, for credit to the respective accounts of the beneficial owners of such Securities (or to such other accounts as they may direct).

Without unnecessary delay but in any event not later than the date specified in, or determined pursuant to the terms of, any such temporary Global Security (the "Exchange Date"), the Company shall deliver to the Trustee definitive Securities, in aggregate principal amount equal to the principal amount of such temporary Global Security, executed by the Company. On or after the Exchange Date, such temporary Global Security shall be surrendered by the Common Depository to the Trustee, as the Company's agent for such purpose, to be exchanged, in whole or from time to time in part, for definitive Securities without charge, and the Trustee shall authenticate and deliver, in exchange for each portion of such temporary Global Security, an equal aggregate principal amount of definitive Securities of the same series of authorized denominations and of like tenor as the portion of such temporary Global Security to be exchanged. The definitive Securities to be delivered in exchange for any such temporary Global Security shall be in bearer form, registered form, permanent global bearer form or permanent global registered form, or any combination thereof, as specified as contemplated by Section 301, and, if any combination thereof is so specified, as requested by the beneficial owner thereof (as directed by or pursuant to information provided by the Common Depository); provided, however, that, unless otherwise specified in such temporary Global Security, upon such presentation by the Common Depository, such temporary Global Security shall be accompanied by a certificate dated the Exchange Date or a subsequent date and signed by Euroclear as to the portion of such temporary Global Security held for its account then to be exchanged and a certificate dated the Exchange Date or a subsequent date and signed by Clearstream as to the portion of such temporary Global Security held for its account then to be exchanged, each in the form set forth in Exhibit B-2 to this Indenture or in such other form as may be established pursuant to Section 301; and provided further that definitive Bearer Securities shall be delivered in exchange for a portion of a temporary Global Security only in compliance with the requirements of Section 303.

Unless otherwise specified in such temporary Global Security, the interest of a beneficial owner of Securities of a series in a temporary Global Security shall be exchanged for definitive Securities of the same series and of like tenor following the Exchange Date when the account holder instructs Euroclear or Clearstream, as the case may be, to request such exchange on his behalf and delivers to Euroclear or Clearstream, as the case may be, a certificate in the form set forth in Exhibit B-1 to this Indenture (or in such other form as may be established pursuant to Section 301), dated no earlier than 15 days prior to the Exchange Date, copies of which certificate shall be available from the offices of Euroclear and Clearstream, the Trustee, any Authenticating Agent appointed for such series of Securities and each Paying Agent. Unless otherwise specified in such temporary Global Security, any such exchange shall be made free of charge to the beneficial owners of such temporary Global Security, except that a Person receiving definitive Securities must bear the cost of insurance, postage, transportation and the like unless such Person takes delivery of such definitive Securities in person at the offices of Euroclear or Clearstream. Definitive Securities in bearer form to be delivered in exchange for any portion of a temporary Global Security shall be delivered only to an address located outside the United States.

Until exchanged in full as hereinabove provided, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of the same series and of like tenor authenticated and delivered hereunder, except that, unless otherwise specified as contemplated by Section 301, interest payable on a temporary Global Security on an

Interest Payment Date for Securities of such series occurring prior to the applicable Exchange Date shall be payable to Euroclear and Clearstream on such Interest Payment Date upon delivery by Euroclear and Clearstream to the Trustee of a certificate or certificates in the form set forth in Exhibit B-2 to this Indenture (or in such other forms as may be established pursuant to Section 301), for credit without further interest on or after such Interest Payment Date to the respective accounts of Persons who are the beneficial owners of such temporary Global Security on such Interest Payment Date and who have each delivered to Euroclear or Clearstream, as the case may be, a certificate dated no earlier than 15 days prior to the Interest Payment Date occurring prior to such Exchange Date in the form set forth as Exhibit B-1 to this Indenture (or in such other forms as may be established pursuant to Section 301). Notwithstanding anything to the contrary herein contained, the certifications made pursuant to this paragraph shall satisfy the certification requirements of the preceding two paragraphs of this Section 304(b) and of the third paragraph of Section 303 of this Indenture and the interests of the Persons who are the beneficial owners of the temporary Global Security with respect to which such certification was made will be exchanged for definitive Securities of the same series and of like tenor on the Exchange Date or the date of certification if such date occurs after the Exchange Date, without further act or deed by such beneficial owners. Except as otherwise provided in this paragraph, no payments of principal or interest owing with respect to a beneficial interest in a temporary Global Security will be made unless and until such interest in such temporary Global Security shall have been exchanged for an interest in a definitive Security. Any interest so received by Euroclear and Clearstream and not paid as herein provided shall be returned to the Trustee prior to the expiration of two years after such Interest Payment Date in order to be repaid to the Company.

With respect to Exhibit B-1 or B-2 to this Indenture, the Company may, in its discretion and if required or desirable under applicable law, substitute one or more other forms of such exhibits for such exhibits, eliminate the requirement that any or all certificate be provided, or change the time that any certificate may be required, provided that such substitute form or forms or notice of elimination or change of such certification requirement have theretofore been delivered to the Trustee with a Company Request and such form or forms, elimination or change is reasonably acceptable to the Trustee.

**SECTION 305 Registration, Registration of Transfer, Conversion and Exchange.** The Company shall cause to be kept at the Corporate Trust Office of the Trustee or in any office or agency of the Company in a Place of Payment a register for each series of Securities (the registers maintained in such office or in any such office or agency of the Company in a Place of Payment being herein sometimes referred to collectively as the “Security Register”) in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Registered Securities and of transfers of Registered Securities. The Security Register shall be in written form or any other form capable of being converted into written form within a reasonable time. The Trustee, at its Corporate Trust Office, is hereby initially appointed “Security Registrar” for the purpose of registering Registered Securities and transfers of Registered Securities on such Security Register as herein provided. In the event that the Trustee shall cease to be Security Registrar, it shall have the right to examine, and be provided a copy of, the Security Register at all reasonable times.

Subject to the provisions of this Section 305, upon surrender for registration of transfer of any Registered Security of any series at any office or agency of the Company in a Place of Payment

for that series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Registered Securities of the same series, of any authorized denominations and of a like aggregate principal amount, bearing a number not contemporaneously outstanding, and containing identical terms and provisions.

Subject to the provisions of this Section 305, at the option of the Holder, Registered Securities of any series may be exchanged for other Registered Securities of the same series, of any authorized denomination or denominations and of a like aggregate principal amount, containing identical terms and provisions, upon surrender of the Registered Securities to be exchanged at any such office or agency. Whenever any such Registered Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Registered Securities which the Holder making the exchange is entitled to receive. Unless otherwise specified with respect to any series of Securities as contemplated by Section 301, Bearer Securities may not be issued in exchange for Registered Securities.

If (but only if) permitted by the applicable Board Resolution and (subject to Section 303) set forth in the applicable Officers' Certificate, or in any indenture supplemental hereto, delivered as contemplated by Section 301, at the option of the Holder, Bearer Securities of any series may be exchanged for Registered Securities of the same series of any authorized denominations and of a like aggregate principal amount and tenor, upon surrender of the Bearer Securities to be exchanged at any such office or agency, with all unmatured coupons and all matured coupons in default thereto appertaining. If the Holder of a Bearer Security is unable to produce any such unmatured coupon or coupons or matured coupon or coupons in default, any such permitted exchange may be effected if the Bearer Securities are accompanied by payment in funds acceptable to the Company (or to the Trustee for the Security in case of matured coupons in default) in an amount equal to the face amount of such missing coupon or coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there is furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to any Paying Agent any such missing coupon in respect of which such a payment shall have been made, such Holder shall be entitled to receive the amount of such payment; provided, however, that, except as otherwise provided in Section 1002, interest represented by coupons shall be payable only upon presentation and surrender of those coupons at an office or agency located outside the United States. Notwithstanding the foregoing, in case a Bearer Security of any series is surrendered at any such office or agency in a permitted exchange for a Registered Security of the same series and like tenor after the close of business at such office or agency on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date or proposed date for payment, as the case may be, and interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

29

---

Notwithstanding the foregoing, except as otherwise specified as contemplated by Section 301, any permanent Global Security shall be exchangeable only as provided in this paragraph. If the depository for any permanent Global Security is DTC, then, unless the terms of such Global Security expressly permit such Global Security to be exchanged in whole or in part for definitive Securities, a Global Security may be transferred, in whole but not in part, only to a nominee of DTC, or by a nominee of DTC to DTC, or to a successor to DTC for such Global Security selected or approved by the Company or to a nominee of such successor to DTC. If at any time DTC notifies the Company that it is unwilling or unable to continue as depository for the applicable Global Security or Securities or if at any time DTC ceases to be a clearing agency registered under the Exchange Act if so required by applicable law or regulation, the Company shall appoint a successor depository with respect to such Global Security or Securities. If (w) a successor depository for such Global Security or Securities is not appointed by the Company within 90 days after the Company receives such notice or becomes aware of such unwillingness, inability or ineligibility, (x) the Company delivers to the Trustee for Securities of such series in registered form a Company Order stating that the Securities of such series shall be exchangeable, (y) an Event of Default has occurred and is continuing and the beneficial owners representing a majority in principal amount of the applicable series of Securities represented by such Global Security or Securities advise DTC to cease acting as depository for such Global Security or Securities or (z) the Company, in its sole discretion, determines at any time that all Outstanding Securities (but not less than all) of any series issued or issuable in the form of one or more Global Securities shall no longer be represented by such Global Security or Securities, then the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities of like series, rank, tenor and terms in definitive form in an aggregate principal amount equal to the principal amount of such Global Security or Securities. If any beneficial owner of an interest in a permanent global Security is otherwise entitled to exchange such interest for Securities of such series and of like tenor and principal amount of another authorized form and denomination, as specified as contemplated by Section 301 and provided that any applicable notice provided in the permanent Global Security shall have been given, then without unnecessary delay but in any event not later than the earliest date on which such interest may be so exchanged, the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities in aggregate principal amount equal to the principal amount of such beneficial owner's interest in such permanent Global Security. On or after the earliest date on which such interests may be so exchanged, such permanent Global Security shall be surrendered for exchange by DTC or such other depository as shall be specified in the Company Order with respect thereto to the Trustee, as the Company's agent for such purpose; provided, however, that no such exchanges may occur during a period beginning at the opening of business 15 days before any selection of Securities to be redeemed and ending on the relevant Redemption Date if the Security for which exchange is requested may be among those selected for redemption; and provided further that no Bearer Security delivered in exchange for a portion of a permanent Global Security shall be mailed or otherwise delivered to any location in the United States. If a Registered Security is issued in exchange for any portion of a permanent Global Security after the close of business at the office or agency where such exchange occurs on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in

30

---

respect of such Registered Security, but will be payable on such Interest Payment Date or proposed date for payment, as the case may be, only to the Person to whom interest in respect of such portion of such permanent Global Security is payable in accordance with the provisions of this Indenture.

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

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

No service charge shall be made to the Holder for any registration of transfer or conversion or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or conversion or exchange of Securities, other than exchanges pursuant to Section 304, 906, 1107, 1305 or 1704 not involving any transfer.

The Company or the Trustee, as applicable, shall not be required (i) to issue, register the transfer of or exchange any Security if such Security may be among those selected for redemption during a period beginning at the opening of business 15 days before selection of the Securities to be redeemed under Section 1103 and ending at the close of business on (A) if such Securities are issuable only as Registered Securities, the day of the mailing of the relevant notice of redemption and (B) if such Securities are issuable as Bearer Securities, the day of the first publication of the relevant notice of redemption or, if such Securities are also issuable as Registered Securities and there is no publication, the mailing of the relevant notice of redemption, or (ii) to register the transfer of or exchange any Registered Security so selected for redemption in whole or in part, except, in the case of any Registered Security to be redeemed in part, the portion thereof not to be redeemed, or (iii) to exchange any Bearer Security so selected for redemption except that such a Bearer Security may be exchanged for a Registered Security of that series and like tenor, provided that such Registered Security shall be simultaneously surrendered for redemption, or (iv) to issue, register the transfer of or exchange any Security which has been surrendered for repayment at the option of the Holder, except the portion, if any, of such Security not to be so repaid.

Furthermore, notwithstanding any other provision of this Section 305, the Company will not be required to exchange any Securities if, as a result of the exchange, the Company would suffer adverse consequences under any United States law or regulation.

SECTION 306 Mutilated, Destroyed, Lost and Stolen Securities. If any mutilated Security or a Security with a mutilated coupon appertaining to it is surrendered to the Trustee or the Company, together with, in proper cases, such security or indemnity as may be required by the Company or the Trustee to save each of them or any agent of either of them harmless, the

Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to the surrendered Security.

If there shall be delivered to the Company and to the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security or coupon, and (ii) such security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of notice to the Company or the Trustee that such Security or coupon has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security or in exchange for the Security to which a destroyed, lost or stolen coupon appertains (with all appurtenant coupons not destroyed, lost or stolen), a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains.

Notwithstanding the provisions of the previous two paragraphs, in case any such mutilated, destroyed, lost or stolen Security or coupon has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains, pay such Security or coupon if the applicant for such payment shall furnish to the Company and the Trustee for such Security such security or indemnity as may be required by them to save each of them harmless, and in the case of destruction, loss or theft, evidence satisfactory to the Company and Trustee and any agent of any of them of the destruction, loss or theft of such Security and the ownership thereof; provided, however, that payment of principal of (and premium or Make-Whole Amount, if any), and interest, if any, on, Bearer Securities shall, except as otherwise provided in Section 1002, be payable only at an office or agency located outside the United States and, unless otherwise specified as contemplated by Section 301, any interest on Bearer Securities shall be payable only upon presentation and surrender of the coupons appertaining thereto.

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 relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

Every new Security of any series with its coupons, if any, issued pursuant to this Section in lieu of any destroyed, lost or stolen Security, or in exchange for a Security to which a destroyed, lost or stolen coupon appertains, shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security and its coupons, if any, or the destroyed, lost or stolen coupon 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 and their coupons, if any, duly issued hereunder.

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 or coupons.

SECTION 307 Payment of Interest; Interest Rights Preserved. Except as otherwise specified with respect to a series of Securities in accordance with the provisions of Section 301, interest on any Registered 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 that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest payment at the office or agency of the Company maintained for such purpose pursuant to Section 1002; provided, however, that each installment of interest on any Registered Security may at the Company's option be paid by (i) mailing a check for such interest, payable to or upon the written order of the Person entitled thereto pursuant to Section 308, to the address of such Person as it appears on the Security Register or (ii) transfer to an account maintained by the payee located inside the United States.

Unless otherwise provided as contemplated by Section 301 with respect to the Securities of any series, payment of interest may be made, in the case of a Bearer Security, by transfer to an account maintained by the payee with a bank located outside the United States.

Unless otherwise provided as contemplated by Section 301, every permanent Global Security will provide that interest, if any, payable on any Interest Payment Date will be paid to DTC, Euroclear and/or Clearstream, as the case may be, with respect to that portion of such permanent Global Security held for its account by Cede & Co. or the Common Depository, as the case may be, for the purpose of permitting such party to credit the interest received by it in respect of such permanent Global Security to the accounts of the beneficial owners thereof.

In case a Bearer Security of any series is surrendered in exchange for a Registered Security of such series after the close of business (at an office or agency in a Place of Payment for such series) on any Regular Record Date and before the opening of business (at such office or agency) on the next succeeding Interest Payment Date, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date and interest will not be payable on such Interest Payment Date in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

Except as otherwise specified with respect to a series of Securities in accordance with the provisions of Section 301, any interest on any Registered Security of any series 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 registered Holder thereof on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, 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 Registered Security of such series and the date of the proposed payment (which shall not be less than 20 days after such notice is received by the Trustee), and at the same time the Company shall deposit with the Trustee an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) 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 on or 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 days and not less than 10 days prior to the date of the proposed payment and not less than 10 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 each Holder of Registered Securities of such series at his address as it appears in the Security Register not less than 10 days prior to such Special Record Date. The Trustee may, in its discretion, in the name and at the expense of the Company, cause a similar notice to be published at least once in an Authorized Newspaper in each Place of Payment, but such publications shall not be a condition precedent to the establishment of 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 the Registered Securities of such series (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 (2). In case a Bearer Security of any series is surrendered at the office or agency in a Place of Payment for such series in exchange for a Registered Security of such series after the close of business at such office or agency on any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such proposed date of payment and Defaulted Interest will not be payable on such proposed date of payment in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

(2) The Company may make payment of any Defaulted Interest on the Registered Securities of any series in any other lawful manner not inconsistent with the requirements of any over-the-counter market or securities exchange on which such Securities may be quoted or listed, and upon such notice as may be required by such market or 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.

Subject to the foregoing provisions of this Section and Section 305, each Security delivered under this Indenture upon registration of transfer of or upon conversion of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.



SECTION 308 Persons Deemed Owners. Prior to due presentment of a Registered Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name such Registered Security is registered as the owner of such Security for the purpose of receiving payment of principal of (and premium or Make-Whole Amount, if any), and (subject to Sections 305 and 307) interest on, such Registered Security and for all other purposes whatsoever, whether or not such Registered 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 such payments so made to any such Person, or upon such Person's order, shall be valid, and, to the extent of the sum or sums so paid, effectual to satisfy and discharge the liability for money payable upon any such Security.

Title to any Bearer Security and any coupons appertaining thereto shall pass by delivery. The Company, the Trustee and any agent of the Company or the Trustee may treat the Holder of any Bearer Security and the Holder of any coupon as the absolute owner of such Security or coupon for the purpose of receiving payment thereof or on account thereof and for all other purposes whatsoever, whether or not such Security or coupon 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.

No holder of any beneficial interest in any Global Security held on its behalf by a depository shall have any rights under this Indenture with respect to such Global Security and such depository (which is the Holder of such security) shall be treated by the Company, the Trustee, and any agent of the Company or the Trustee as the owner of such Global Security for all purposes whatsoever. None of the Company, the Trustee, any Paying Agent or the Security Registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests of a Global Security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Notwithstanding the foregoing, with respect to any Global Security, nothing herein shall prevent the Company, the Trustee, or any agent of the Company or the Trustee, from giving effect to any written certification, proxy or other authorization furnished by any depository, as a Holder, with respect to such Global Security or impair, as between such depository and owners of beneficial interests in such Global Security, the operation of customary practices governing the exercise of the rights of such depository (or its nominee) as Holder of such Global Security.

SECTION 309 Cancellation. All Securities and coupons surrendered for payment, redemption, repayment at the option of the Holder, registration of transfer or conversion or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee, and any such Securities and coupons and Securities and coupons surrendered directly to the Trustee for any such purpose, upon direction by the Company, shall be promptly cancelled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly cancelled by the Trustee. If the Company shall so acquire any of the Securities, however, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are surrendered to the

Trustee for cancellation. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section, except as expressly permitted by this Indenture. Cancelled Securities and coupons held by the Trustee shall be disposed of by the Trustee in accordance with its customary practices (subject to the record retention requirements of the Exchange Act).

SECTION 310 Computation of Interest. Except as otherwise specified as contemplated by Section 301 with respect to Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

SECTION 311 CUSIP Numbers. The Company in issuing the Securities may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption as a convenience to Holders; provided, however, 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 of any change in the "CUSIP" numbers.

#### **ARTICLE 4 SATISFACTION AND DISCHARGE**

SECTION 401 Satisfaction and Discharge of Indenture. This Indenture shall upon Company Request cease to be of further effect with respect to any series of Securities specified in such Company Request (except as to any surviving rights of registration of transfer or conversion or exchange of Securities of such series herein expressly provided for), and the Trustee, upon receipt of a Company Order, and at the expense of the Company, shall execute instruments in form and substance satisfactory to the Trustee and the Company acknowledging satisfaction and discharge of this Indenture as to such series when (1) either (A) all Securities of such series theretofore authenticated and delivered and all coupons, if any, appertaining thereto (other than (i) coupons appertaining to Bearer Securities surrendered for exchange for Registered Securities and maturing after such exchange, whose surrender is not required or has been waived as provided in Section 305, (ii) Securities and coupons of such series which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 306, (iii) coupons appertaining to Securities called for redemption and maturing after the relevant Redemption Date, whose surrender has been waived as provided in Section 1106, and (iv) Securities and coupons of such series 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 1003) have been delivered to the Trustee for cancellation; or (B) all Securities of such series and, in the case of (i) or (ii) below, any coupons appertaining thereto not theretofore delivered to the Trustee for cancellation

- (i) have become due and payable, or
- (ii) will become due and payable at their Stated Maturity within one year, or

(iii) if redeemable at the option of the Company, are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company, and the Company, in the case of (i), (ii) or (iii) above, has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose an amount in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable, sufficient to pay and discharge the entire indebtedness on such Securities and such coupons not theretofore delivered to the Trustee for cancellation, for principal (and premium or Make-Whole Amount, if any) and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

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

(2) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture as to such series have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee and any predecessor Trustee under Section 606, the obligations of the Company to any Authenticating Agent under Section 611 and, if money shall have been deposited with and held by the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 402 and the last paragraph of Section 1003 shall survive such satisfaction and discharge.

SECTION 402 Application of Trust Funds. Subject to the provisions of the last paragraph of Section 1003, all money deposited with the Trustee pursuant to Section 401 shall be held in trust and applied by it, in accordance with the provisions of the Securities, the coupons and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the principal (and premium or Make-Whole Amount, if any), and any interest for whose payment such money has been deposited with or received by the Trustee, but such money need not be segregated from other funds except to the extent required by law.

## **ARTICLE 5 REMEDIES**

SECTION 501 Events of Default. "Event of Default," wherever used herein with respect to any particular series of Securities, means any one of the following events (whatever the reason for such Event of Default and whether or not it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

(1) default in the payment of any interest on any Security of that series or of any coupon appertaining thereto, when such interest or coupon becomes due and payable, and continuance of such default for a period of 30 days; or

(2) default in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of that series when it becomes due and payable at its Maturity; or

(3) default in the deposit of any sinking fund payment, to the extent applicable to such series of Securities, when and as due by the terms of any Security of that series; or

(4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture with respect to any Security of that series (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of a series of Securities other than that series), and continuance of such default or breach for a period of 60 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities of that series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or

(5) default under any bond, debenture, note, mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any indebtedness for money borrowed by the Company (or by any Subsidiary, the repayment of which the Company has guaranteed or for which the Company is directly responsible or liable as obligor or guarantor), having an aggregate principal amount outstanding of at least \$30,000,000, whether such indebtedness now exists or shall hereafter be created, which default shall have resulted in such indebtedness becoming or being declared due and payable prior to the date on which it would otherwise have become due and payable, without such indebtedness having been discharged, or such acceleration having been rescinded or annulled, within a period of 30 days after there shall have been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 10% in principal amount of the Outstanding Securities of that series a written notice specifying such default and requiring the Company to cause such indebtedness to be discharged or cause such acceleration to be rescinded or annulled and stating that such notice is a "Notice of Default" hereunder; provided, however, that, subject to the provisions of Sections 601 and 602, the Trustee shall not be deemed to have knowledge of such default unless either (A) a Responsible Officer of the Trustee shall have knowledge of such default or (B) the Trustee shall have received written notice thereof from the Company, from any Holder, from the holder of any such indebtedness or from the trustee under any such mortgage, indenture or other instrument; or

(6) the Company or any Significant Subsidiary pursuant to or within the meaning of any Bankruptcy Law:

(A) commences a voluntary case,

(B) consents to the entry of an order for relief against it in an involuntary case,

- (C) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
- (D) makes a general assignment for the benefit of its creditors; or
- (7) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:
  - (A) is for relief against the Company or any Significant Subsidiary in an involuntary case,
  - (B) appoints a Custodian of the Company or any Significant Subsidiary or for all or substantially all of either of its property, or
  - (C) orders the liquidation of the Company or any Significant Subsidiary, and the order or decree remains unstayed and in effect for 90 days; or
  - (8) any other Event of Default provided with respect to Securities of that series.

As used in this Section 501, the term “Bankruptcy Law” means title 11, U.S. Code or any similar Federal or state law for the relief of debtors and the term “Custodian” means any receiver, trustee, assignee, liquidator or other similar official under any Bankruptcy Law.

SECTION 502 Acceleration of Maturity; Rescission and Annulment. If an Event of Default with respect to Securities of any series at the time Outstanding occurs and is continuing, then and in every such case the Trustee or the Holders of not less than 25% in principal amount of the Outstanding Securities of that series may declare the principal amount (or, if Securities of that Series are Original Issue Discount Securities or Indexed Securities, such portion of the principal as may be specified in the terms thereof) of all the Securities of that series to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by the Holders), and upon any such declaration such principal or specified portion thereof shall become immediately due and payable.

At any time after such a declaration of acceleration with respect to Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article provided, the Holders of a majority in principal amount of the Outstanding Securities of that series, by written notice to the Company and the Trustee, may rescind and annul such declaration of acceleration and its consequences if:

- (1) the Company has paid or deposited with the Trustee a sum sufficient to pay in the currency, currency unit or composite currency in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series):
  - (A) all overdue installments of interest on all Outstanding Securities of that series and any related coupons,

(B) the principal of (and premium or Make-Whole Amount, if any, on) any Outstanding Securities of that series which have become due otherwise than by such declaration of acceleration and interest thereon at the rate or rates borne by or provided for in such Securities,

(C) to the extent that payment of such interest is lawful, interest upon overdue installments of interest at the rate or rates borne by or provided for in such Securities, and

(D) all sums paid or advanced by the Trustee hereunder and the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel; and

(2) all Events of Default with respect to Securities of that series, other than the nonpayment of the principal of (or premium or Make-Whole Amount, if any) or interest on Securities of that series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 513.

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

SECTION 503 Collection of Indebtedness and Suits for Enforcement by Trustee. The Company covenants that if:

(1) default is made in the payment of any installment of interest on any Security of any series and any related coupon when such interest becomes due and payable and such default continues for a period of 30 days, or

(2) default is made in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of any series at its Maturity, then the Company will, upon demand of the Trustee, pay to the Trustee, for the benefit of the Holders of such Securities of such series and coupons, the whole amount then due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, with interest upon any overdue principal (and premium or Make-Whole Amount, if any) and, to the extent that payment of such interest shall be legally enforceable, upon any overdue installments of interest at the rate or rates borne by or provided for in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, and may prosecute such proceeding to judgment or final decree, and may enforce the same against the Company or any other obligor upon such Securities of such series and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities of such series, wherever situated.

40

---

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series and any related coupons by such appropriate judicial proceedings as the Trustee shall deem necessary to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

SECTION 504 Trustee May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities of any series shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal, premium or Make-Whole Amount, if any, or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(i) to file and prove a claim for the whole amount, or such lesser amount as may be provided for in the Securities of such series, of principal (and premium or Make-Whole Amount, if any) and interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceeding, and

(ii) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator (or other similar official) in any such judicial proceeding is hereby authorized by each Holder of Securities of such series and coupons to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee and any predecessor Trustee, their agents and counsel, and any other amounts due the Trustee or any predecessor Trustee under Section 606.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder of a Security or coupon any plan of reorganization, arrangement, adjustment or composition affecting the Securities or coupons or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder of a Security or coupon in any such proceeding.

In any proceedings brought by the Trustee (and also any proceedings involving the interpretation of any provision of this Indenture to which the Trustee shall be a party) the Trustee shall be held to represent all the Holders of the Securities, and it shall not be necessary to make any Holders of the Securities parties to any such proceedings.

41

---

SECTION 505 Trustee May Enforce Claims Without Possession of Securities or Coupons. All rights of action and claims under this Indenture or any of the Securities or coupons may be prosecuted and enforced by the Trustee without the possession of any of the Securities or coupons or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Securities and coupons in respect of which such judgment has been recovered.

SECTION 506 Application of Money Collected. Any money collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal (or premium or Make-Whole Amount, if any) or interest, upon presentation of the Securities or coupons, or both, as the case may be, and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee and any predecessor Trustee under Section 606;

SECOND: To the payment of the amounts then due and unpaid upon the Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the aggregate amounts due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, respectively; and

THIRD: To the payment of the remainder, if any, to the Company.

SECTION 507 Limitation on Suits. No Holder of any Security of any series or any related coupon shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless:

- (1) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that series;
  - (2) the Holders of not less than 25% in principal amount of the Outstanding Securities of that series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
  - (3) such Holder or Holders have offered to the Trustee indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities to be incurred in compliance with such request;
  - (4) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding;
- and

(5) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the Outstanding Securities of that series;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders, or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders.

SECTION 508 Unconditional Right of Holders to Receive Principal, Premium or Make-Whole Amount, if any, and Interest. Notwithstanding any other provision in this Indenture, the Holder of any Security or coupon shall have the right which is absolute and unconditional to receive payment of the principal of (and premium or Make-Whole Amount, if any) and (subject to Sections 305 and 307) interest on such Security or payment of such coupon on the respective due dates expressed in such Security or coupon (or, in the case of redemption, on the Redemption Date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

SECTION 509 Restoration of Rights and Remedies. If the Trustee or any Holder of a Security or coupon has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, the Company, the Trustee and the Holders of Securities and coupons shall, subject to any determination in such proceeding, be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

SECTION 510 Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities or coupons in the last paragraph of Section 306, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders of Securities or coupons is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

SECTION 511 Delay or Omission Not Waiver. No delay or omission of the Trustee or of any Holder of any Security or coupon to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders of Securities or coupons, as the case may be.

SECTION 512 Control by Holders of Securities. The Holders of not less than a majority in principal amount of the Outstanding Securities of any series shall have the right to direct the



time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Securities of such series, provided that:

- (1) such direction shall not be in conflict with any rule of law or with this Indenture,
- (2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction, and
- (3) the Trustee need not take any action which might involve it in personal liability or be unduly prejudicial to the Holders of Securities of such series not joining therein.

Nothing in this Indenture shall impair the right of the Trustee in its discretion to take any action deemed proper by the Trustee and which is not inconsistent with such direction by Holders.

SECTION 513 Waiver of Past Defaults. The Holders of not less than a majority in principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series and any related coupons waive any past default hereunder with respect to such series and its consequences, except a default

- (1) in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series or any related coupons, or
- (2) in respect of a covenant or provision hereof which under Article Nine cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected; or
- (3) in respect of a covenant or provision hereof for the benefit or protection of the Trustee, without its express written consent.

Upon any such waiver, such default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other default or Event of Default or impair any right consequent thereon.

SECTION 514 Waiver of Usury, Stay or Extension Laws. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

SECTION 515 Undertaking for Costs. All parties to this Indenture agree, and each Holder of any Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this

Indenture, or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in such suit having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the Outstanding Securities of any series, or to any suit instituted by any Holder for the enforcement of the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security on or after the respective Stated Maturities expressed in such Security (or, in the case of redemption, on or after the Redemption Date).

## **ARTICLE 6 THE TRUSTEE**

**SECTION 601 Notice of Defaults.** Within 90 days after the occurrence of any default hereunder with respect to the Securities of any series, the Trustee shall transmit in the manner and to the extent provided in TIA Section 313(c), notice of such default hereunder known to the Trustee, unless such default shall have been cured or waived; provided, however, that, except in the case of a default in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series, or in the payment of any sinking or purchase fund installment with respect to the Securities of such series, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee, or a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interests of the Holders of the Securities and coupons of such series; and provided further that in the case of any default or breach of the character specified in Section 501(4) with respect to the Securities and coupons of such series, no such notice to Holders shall be given until at least 60 days after the occurrence thereof. For the purpose of this Section, the term "default" means any event which is, or after notice or lapse of time or both would become, an Event of Default with respect to the Securities of such series.

**SECTION 602 Certain Rights of Trustee.** Subject to the provisions of TIA Section 315(a) through 315(d):

(1) the Trustee may conclusively rely and shall be fully protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, coupon or other paper or document (whether in its original or facsimile form) reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties;

(2) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order (other than delivery of any Security, together with any coupons appertaining thereto, to the Trustee for authentication and delivery pursuant to Section 303 which shall be sufficiently evidenced as provided therein) and any resolution of the Board of Directors may be sufficiently evidenced by a Board Resolution;

(3) 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 (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officers' Certificate;

(4) the Trustee may consult with counsel of its own selection and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders of Securities of any series or any related coupons pursuant to this Indenture, unless such Holders shall have offered to the Trustee security or indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;

(6) 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, coupon or other paper or document, unless requested in writing so to do by the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series; provided that, if the payment within a reasonable time to the Trustee of the costs, expenses or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require reasonable indemnity against such expenses or liabilities as a condition to proceeding; the reasonable expenses of every such examination shall be paid by the Holders or, if paid by the Trustee, shall be repaid by the Holders upon demand. The Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, relevant to the facts or matters that are the subject of its inquiry, personally or by agent or attorney at the expense of the Company and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation;

(7) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(8) the Trustee shall not be liable for any action taken, suffered or omitted by it in good faith and reasonably believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(9) any permissive right or power available to the Trustee under this Indenture or any supplement hereto shall not be construed to be a mandatory duty or obligation;

(10) the Trustee shall not be charged with knowledge of any matter (including any default, other than as described in Section 501(1), (2) or (3)) unless and except to the extent actually known to a Responsible Officer of the Trustee or to the extent written notice thereof is received by the Trustee at the Corporate Trust Office;

(11) the Trustee shall have no liability for any inaccuracy in the books and records of, or for any actions or omissions of, DTC, Euroclear or Clearstream or any depository acting on behalf of any of them;

(12) 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 by the Trustee to act hereunder; and

(13) the Trustee may request that the Company deliver an Officers' Certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officers' Certificate may be signed by any person authorized to sign an Officers' Certificate, including any person specified as so authorized in any such certificate previously delivered and not superseded.

The Trustee shall not be required to expend or risk its own funds or otherwise 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.

Except during the continuance of an Event of Default, the Trustee undertakes to perform only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee.

**SECTION 603 Not Responsible for Recitals or Issuance of Securities.** The recitals contained herein and in the Securities, except the Trustee's certificate of authentication, and in any coupons shall be taken as the statements of the Company, and neither the Trustee nor any Authenticating Agent assumes any responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities or coupons, except that the Trustee represents that it is duly authorized to execute and deliver this Indenture, authenticate the Securities and perform its obligations hereunder. Neither the Trustee nor any Authenticating Agent shall be accountable for the use or application by the Company of Securities or the proceeds thereof. The Trustee shall have no responsibility with respect to any information, statement or recital in any offering prospectus or other disclosure materials prepared or distributed with respect to the Securities.

**SECTION 604 May Hold Securities.** The Trustee, any Paying Agent, Security Registrar, Authenticating Agent or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and coupons and, subject to TIA Sections 310(b) and 311, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Paying Agent, Security Registrar, Authenticating Agent or such other agent.

SECTION 605 Money Held in Trust. 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.

SECTION 606 Compensation and Reimbursement. The Company agrees:

(1) to pay to the Trustee as agreed upon in writing from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);

(2) except as otherwise expressly provided herein, to reimburse each of the Trustee and any predecessor Trustee upon its request for all reasonable expenses, and disbursements incurred by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the reasonable expenses and disbursements of its agents and counsel), except any such expense or disbursement as shall be determined to have been caused by its own negligence, willful misconduct or bad faith; and

(3) to indemnify each of the Trustee and any predecessor Trustee for, and to hold it harmless against, any loss, liability, claim, damage or expense incurred without negligence, willful misconduct or bad faith on its part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder, including 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.

When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 501(7) or Section 501(8), the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to constitute expenses of administration under any applicable Federal or state bankruptcy, insolvency or other similar law.

As security for the performance of the obligations of the Company under this Section, the Trustee shall have a lien for payment of the Trustee's fees and expenses prior to the Securities upon all property and funds held or collected by the Trustee as such, except funds held in trust for the payment of principal of (or premium or Make-Whole Amount, if any) or interest on particular Securities or any coupons.

The provisions of this Section shall survive the termination of this Indenture and the resignation or removal of the Trustee.

SECTION 607 Corporate Trustee Required; Eligibility; Conflicting Interests. There shall at all times be a Trustee hereunder which shall be eligible to act as Trustee under TIA Section 310(a)(1) and shall have at all times a combined capital and surplus of at least \$50,000,000 (or which shall have a combined capital and surplus of at least \$10,000,000 and whose ultimate parent holding company shall have a combined capital and surplus of at least \$50,000,000). If the Trustee publishes reports of condition at least annually, pursuant to law or the requirements of Federal, state, territorial or District of Columbia supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of the Trustee 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 the Trustee shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article. Neither the Company nor any Person directly or indirectly controlling, controlled by, or under common control with the Company shall serve as Trustee.

SECTION 608 Resignation and Removal; Appointment of Successor.

(a) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 609.

(b) The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(c) The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Trustee and to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(d) 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 of a Security 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 607 and shall fail to resign after written request therefor by the Company or by any Holder of a Security 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 or pursuant to a Board Resolution may remove the Trustee and appoint a successor Trustee with respect to all Securities, or (ii) subject to TIA Section 315(e), any Holder of a Security 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.

(e) If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause with respect to the Securities of one or more series, the Company, by or pursuant to a Board Resolution, shall promptly appoint a successor Trustee or Trustees 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 particular series). If, within one year after such resignation, removal or incapability, or the occurrence of such vacancy, a successor Trustee with respect to the Securities of any series shall be appointed by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders of Securities and accepted appointment in the manner hereinafter provided, any Holder of a Security who has been a bona fide Holder of a Security of such series for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to Securities of such series.

(f) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series in the manner provided for notices to the Holders of Securities in Section 106. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

SECTION 609 Acceptance of Appointment by Successor.

(a) In case of the appointment hereunder of a successor Trustee with respect to all Securities, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee, and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder, subject nevertheless to its claim, if any, provided for in Section 606.

(b) In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto, pursuant to Article Nine hereof, wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not

50

---

retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

(c) Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section 609, as the case may be.

(d) No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

SECTION 610 Merger, Conversion, Consolidation or Succession to Business. Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all of the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities or coupons shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities or coupons so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities or coupons. In case any Securities or coupons shall not have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities or coupons, in either its own name or that of its predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

SECTION 611 Appointment of Authenticating Agent. At any time when any of the Securities remain Outstanding, the Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon conversion or exchange, registration of transfer or partial redemption or repayment thereof, and Securities so authenticated shall be

51

---

entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Any such appointment shall be evidenced by an instrument in writing signed by a Responsible Officer of the Trustee, a copy of which instrument shall be promptly furnished to the Company. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a bank or trust company or corporation organized and doing business and in good standing under the laws of the United States of America or of any state 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 authorities. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. In case at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

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 Section, without the execution or filing of any paper or further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent for any series of Securities may at any time resign by giving written notice of resignation to the Trustee for such series and to the Company. The Trustee for any series of Securities may at any time terminate the agency of an Authenticating Agent by giving written notice of termination 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, the Trustee for such series may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment to all Holders of Securities of the series with respect to which such Authenticating Agent will serve in the manner set forth in Section 106. 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 herein. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Company agrees to pay to each Authenticating Agent from time to time reasonable compensation including reimbursement of its reasonable expenses for its services under this Section, subject to Section 606.



If an appointment with respect to one or more series is made pursuant to this Section, the Securities of such series may have endorsed thereon, in addition to or in lieu of the Trustee's certificate of authentication, an alternate certificate of authentication substantially in the following form:

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

[NAME OF TRUSTEE] as Trustee

Dated: \_\_\_\_\_ By: \_\_\_\_\_  
As Authenticating Agent

Dated: \_\_\_\_\_ By: \_\_\_\_\_  
As Authenticating Agent

SECTION 612 Certain Duties and Responsibilities of the Trustee.

(a) With respect to the Securities of any series, except during the continuance of an Event of Default with respect to the Securities of such series:

(1) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof 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 shall not be under any duty to verify the contents or accuracy thereof.

(b) In case an Event of Default with respect to the Securities of any series has occurred and is continuing, the Trustee shall, with respect to Securities of such series, exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(c) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(1) this Subsection shall not be construed to limit the effect of Subsection (a) of this Section;

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of a majority in principal amount of the Outstanding Securities of any series relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such series; and

(4) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise 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; and, the Trustee shall be under no obligation to exercise any of its rights and powers under this Indenture at the request of any Holder, unless such Holder shall have offered to the Trustee security and indemnity satisfactory to it against any loss, liability or expense.

(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 612.

(e) The Trustee shall not be liable for interest on any money or assets held by it except to the extent the Trustee may agree in writing with the Company. Assets held in trust by the Trustee need not be segregated from other assets except to the extent required by law.

#### **ARTICLE 7 HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY**

SECTION 701 Disclosure of Names and Addresses of Holders. Every Holder of Securities or coupons, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any Authenticating Agent nor any Paying Agent nor any Security Registrar shall be held accountable by reason of the disclosure of any information as to the names and addresses of the Holders of Securities in accordance with TIA Section 312, regardless of the source from which such information was derived, and that the Trustee shall not be held accountable by reason of mailing any material pursuant to a request made under TIA Section 312(b).

SECTION 702 Reports by Trustee. The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required by TIA Section 313 at the times and in the manner provided by the TIA, which shall initially be not less than every twelve months commencing on, 20\_\_\_. A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each over-the-counter market or

securities exchange, if any, upon which any Securities are quoted or listed, with the Commission and with the Company. The Company will notify the Trustee when any Securities are quoted or listed on any over-the-counter market or securities exchange or delisted therefrom.

SECTION 703 Reports by Company. The Company will:

(1) file with the Trustee, within 15 days after the Company is required to file the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) which the Company may be required to file as an accelerated filer with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act (and if the Company's status as an accelerated filer changes, the Company shall provide written notice of such change to the Trustee); or, if the Company is not required to file information, documents or reports pursuant to either of such Sections, then it will file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such of the supplementary and periodic information, documents and reports which may be required pursuant to Section 13 of the Exchange Act in respect of a security quoted or listed and registered on an over-the-counter market or national securities exchange as may be prescribed from time to time in such rules and regulations;

(2) file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such additional information, documents and reports with respect to compliance by the Company with the conditions and covenants of this Indenture as may be required from time to time by such rules and regulations;

(3) transmit by mail to the Holders of Securities, within 30 days after the filing thereof with the Trustee, in the manner and to the extent provided in TIA Section 313(c), such summaries of any information, documents and reports required to be filed by the Company pursuant to paragraphs (1) and (2) of this Section as may be required by rules and regulations prescribed from time to time by the Commission; and

(4) delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates).

SECTION 704 Company to Furnish Trustee Names and Addresses of Holders. The Company will furnish or cause to be furnished to the Trustee:

(a) semiannually, not later than 15 days after the Regular Record Date for interest for each series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Registered Securities of such series as of such Regular Record Date, or if there is no Regular Record Date for interest for such series of Securities, semiannually, upon such dates as are set forth in the Board Resolution or indenture supplemental hereto authorizing such series, and

(b) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished, provided, however, that, so long as the Trustee is the Security Registrar, no such list shall be required to be furnished.

## ARTICLE 8 CONSOLIDATION, MERGER, SALE, LEASE OR CONVEYANCE

SECTION 801 Consolidations and Mergers of Company and Sales, Leases and Conveyances Permitted Subject to Certain Conditions. The Company may consolidate with, or sell, lease or convey all or substantially all of its assets to, or merge with or into any other corporation, provided that in any such case, (1) either the Company shall be the continuing corporation, or the successor corporation shall be a corporation organized and existing under the laws of the United States or a State thereof and such successor corporation shall expressly assume the due and punctual payment of the principal of (and premium or Make-Whole Amount, if any) and any interest on all of the Securities, according to their tenor, and the due and punctual performance and observance of all of the covenants and conditions of this Indenture to be performed by the Company by supplemental indenture, complying with Article Nine hereof, satisfactory to the Trustee, executed and delivered to the Trustee by such corporation, (2) immediately after giving effect to such transaction and treating any indebtedness which becomes an obligation of the Company or any Subsidiary as a result thereof as having been incurred by the Company or such Subsidiary at the time of such transaction, no Event of Default, and no event which, after notice or the lapse of time, or both, would become an Event of Default, shall have occurred and be continuing and (3) the Company shall have delivered to the Trustee the Officer's Certificate and Opinion of Counsel required pursuant to Section 803 below.

SECTION 802 Rights and Duties of Successor Corporation. In case of any such consolidation, merger, sale, lease or conveyance and upon any such assumption by the successor corporation, such successor corporation shall succeed to and be substituted for the Company, with the same effect as if it had been named herein as the party of the first part, and the predecessor corporation, except in the event of a lease, shall be relieved of any further obligation under this Indenture and the Securities. Such successor corporation thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Securities issuable hereunder which theretofore shall not have been signed by the Company and delivered to the Trustee; and, upon the order of such successor corporation, instead of the Company, and subject to all the terms, conditions and limitations in this Indenture prescribed, the Trustee shall authenticate and shall deliver any Securities which previously shall have been signed and delivered by the officers of the Company to the Trustee for authentication, and any Securities which such successor corporation thereafter shall cause to be signed and delivered to the Trustee for that purpose. All the Securities so issued shall in all respects have the same legal rank and benefit under this Indenture as the Securities theretofore or thereafter issued in accordance with the terms of this Indenture as though all of such Securities had been issued at the date of the execution hereof.

In case of any such consolidation, merger, sale, lease or conveyance, such changes in phraseology and form (but not in substance) may be made in the Securities thereafter to be issued as may be appropriate.

SECTION 803 Officers' Certificate and Opinion of Counsel. Any consolidation, merger, sale, lease or conveyance permitted under Section 801 is also subject to the condition that the Trustee receive an Officers' Certificate and an Opinion of Counsel to the effect that any such consolidation, merger, sale, lease or conveyance, and the assumption by any successor corporation, complies with the provisions of this Article and that all conditions precedent herein provided for relating to such transaction have been complied with.

## ARTICLE 9 SUPPLEMENTAL INDENTURES

SECTION 901 Supplemental Indentures Without Consent of Holders. Without the consent of any Holders of Securities or coupons, the Company, when authorized by or pursuant to a Board Resolution, 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 of the following purposes:

- (1) to evidence the succession of another Person to the Company and the assumption by any such successor of the covenants of the Company contained herein and in the Securities; or
- (2) to add to the covenants of the Company for the benefit of the Holders of all or any series of Securities (and if such covenants are to be for the benefit of less than all series of Securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any right or power herein conferred upon the Company; or
- (3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such Events of Default are to be for the benefit of less than all series of Securities, stating that such Events of Default are expressly being included solely for the benefit of such series); provided, however, that in respect of any such additional Events of Default such supplemental indenture may provide for a particular period of grace after default (which period may be shorter or longer than that allowed in the case of other defaults) or may provide for an immediate enforcement upon such default or may limit the remedies available to the Trustee upon such default or may limit the right of the Holders of a majority in aggregate principal amount of that or those series of Securities to which such additional Events of Default apply to waive such default; or
- (4) to add to or change any of the provisions of this Indenture to provide that Bearer Securities may be registrable as to principal, to change or eliminate any restrictions on the payment of principal of or premium or Make-Whole Amount, if any, or interest on Bearer Securities, to permit Bearer Securities to be issued in exchange for Registered Securities, to permit Bearer Securities to be issued in exchange for Bearer Securities of other authorized denominations or to permit or facilitate the issuance of Securities in uncertificated form, provided that any such action shall not adversely affect the interests of the Holders of Securities of any series or any related coupons in any material respect; or
- (5) 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 Security

Outstanding of any series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision; or

(6) to secure the Securities; or

(7) to establish the form or terms of Securities of any series and any related coupons as permitted or contemplated by Sections 201 and 301; or

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

(9) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture which shall not be inconsistent with the provisions of this Indenture, provided such provisions shall not adversely affect the interests of the Holders of Securities of any series or any related coupons in any material respect; or

(10) 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 pursuant to Sections 401, 1402 and 1403; provided that any such action shall not adversely affect the interests of the Holders of Securities of such series and any related coupons or any other series of Securities in any material respect; or

(11) to make provisions with respect to Holders' rights of conversion with respect to any series of Securities pursuant to Article Seventeen.

SECTION 902 Supplemental Indentures with Consent of Holders. With the consent of the Holders of not less than a majority in principal amount of all Outstanding Securities affected by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by or pursuant to a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities and any related coupons under this Indenture; provided, however, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby:

(1) change the Stated Maturity of the principal of (or premium or Make-Whole Amount, if any, on) or any installment of principal of or interest on, any Security; or reduce the principal amount thereof or the rate or amount of interest thereon, or any premium or Make-Whole Amount payable upon the redemption thereof, 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 502 or the amount thereof provable in bankruptcy pursuant to Section 504, or adversely affect any right of repayment at the option of the Holder of any Security, or change any Place of Payment where, or the currency or currencies, currency unit or units or composite currency or currencies in which, any Security or

any premium or Make-Whole Amount or the interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption or repayment at the option of the Holder, on or after the Redemption Date or the Repayment Date, as the case may be), or (if Securities of such series are convertible) adversely affect the right of the Holder to convert any Security as provided in Article Seventeen, or modify the provisions of this Indenture with respect to the subordination of the Securities in a manner materially adverse to the Holders; or

(2) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver with respect to such series (or compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture, or reduce the requirements of Section 1504 for quorum or voting, or

(3) modify any of the provisions of this Section, Section 513 or Section 1009, except to increase the required percentage to effect such action 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 902 and Section 1009, or the deletion of this proviso, in accordance with the requirements of Sections 609(b) and 901(8).

It shall not be necessary for any Act of Holders under this Section 902 to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof.

A supplemental indenture which changes or eliminates any covenant or other 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.

**SECTION 903 Execution of Supplemental Indentures.** In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modification thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 612) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee’s own rights, duties or immunities under this Indenture or otherwise.

**SECTION 904 Effect of Supplemental Indentures.** Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder and of any coupon appertaining thereto shall be bound thereby.

SECTION 905 Conformity with Trust Indenture Act. Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

SECTION 906 Reference in Securities to Supplemental Indentures. Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall, if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series.

## ARTICLE 10 COVENANTS

SECTION 1001 Payment of Principal, Premium or Make-Whole Amount, if any, and Interest. The Company covenants and agrees for the benefit of the Holders of each series of Securities that it will duly and punctually pay the principal of (and premium or Make-Whole Amount, if any) and interest on the Securities of that series in accordance with the terms of such series of Securities, any coupons appertaining thereto and this Indenture. Unless otherwise specified as contemplated by Section 301 with respect to any series of Securities, any interest due on Bearer Securities on or before Maturity shall be payable only upon presentation and surrender of the several coupons for such interest installments as are evidenced thereby as they severally mature. Unless otherwise specified with respect to Securities of any series pursuant to Section 301, at the option of the Company (upon written notice to the Trustee), all payments of principal may be paid by check to the registered Holder of the Registered Security or other Person entitled thereto against surrender of such Security.

SECTION 1002 Maintenance of Office or Agency. If Securities of a series are issuable only as Registered Securities, the Company shall maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment or conversion, where Securities of that series may be surrendered for registration of transfer or conversion or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. If Securities of a series are issuable as Bearer Securities, the Company will maintain: (A) in the Borough of Manhattan, The City of New York, an office or agency where any Registered Securities of that series may be presented or surrendered for payment or conversion, where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange, where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served and where Bearer Securities of that series and related coupons may be presented or surrendered for payment or conversion in the circumstances described in the following paragraph (and not otherwise); (B) subject to any laws or regulations applicable thereto, in a Place of Payment for that series which is located outside the United States, an office or agency where Securities of that series and related coupons may be presented and surrendered for payment; provided, however, that if the Securities of that series are listed on any stock exchange located outside the United States and

60

---

such stock exchange shall so require, the Company will maintain a Paying Agent for the Securities of that series in any required city located outside the United States, as the case may be, so long as the Securities of that series are listed on such exchange; and (C) subject to any laws or regulations applicable thereto, in a Place of Payment for that series located outside the United States an office or agency where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of each 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, except that Bearer Securities of that series and the related coupons may be presented and surrendered for payment or conversion at the offices specified in the Security, in London, England, and the Company hereby appoints the same as its agent to receive such respective presentations, surrenders, notices and demands, and the Company hereby appoints the Trustee its agent to receive all such presentations, surrenders, notices and demands.

Unless otherwise specified with respect to any Securities pursuant to Section 301, no payment of principal, premium or Make-Whole Amount or interest on Bearer Securities shall be made at any office or agency of the Company in the United States or by check mailed to any address in the United States or by transfer to an account maintained with a bank located in the United States; provided, however, that, if the Securities of a series are payable in Dollars, payment of principal of and any premium or Make-Whole Amount and interest on any Bearer Security shall be made at the office of the Company's Paying Agent in the Borough of Manhattan, The City of New York, if (but only if) payment in Dollars of the full amount of such principal, premium or Make-Whole Amount, or interest, as the case may be, at all offices or agencies outside the United States maintained for the purpose by the Company in accordance with this Indenture, is illegal or effectively precluded by exchange controls or other similar restrictions.

The Company may from time to time designate one or more other offices or agencies (in or outside the Place of Payment) where the Securities of one or more series may be presented or surrendered for any or all of such purposes, and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in accordance with the requirements set forth above for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency. Unless otherwise specified with respect to any Securities pursuant to Section 301 with respect to a series of Securities, the Company hereby designates as a Place of Payment for each series of Securities, each of (i) the office or agency of the Company in the Borough of Manhattan, The City of New York, and (ii) the Corporate Trust Office of the Trustee (as Paying Agent); and the Company hereby initially appoints the Trustee at its Corporate Trust Office as Paying Agent in such city; and the Company hereby initially appoints as its agent to receive all such presentations, surrenders, notices and demands each of the Trustee, at its Corporate Trust Office.

61

---



Unless otherwise specified with respect to any Securities pursuant to Section 301, if and so long as the Securities of any series (i) are denominated in a Foreign Currency or (ii) may be payable in a Foreign Currency, or so long as it is required under any other provision of the Indenture, then the Company will maintain with respect to each such series of Securities, or as so required, at least one exchange rate agent (of which it shall give written notice to the Trustee).

SECTION 1003 Money for Securities Payments to Be Held in Trust. If the Company shall at any time act as its own Paying Agent with respect to any series of any Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any of the Securities of that series, segregate and hold in trust for the benefit of the Persons entitled thereto a sum in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided, and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any Securities of that series, deposit with a Paying Agent a sum (in the currency or currencies, currency unit or units or composite currency or currencies described in the preceding paragraph) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or Make-Whole Amount, if any, or interest and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

The Company will cause each Paying Agent for any series of Securities other than the Trustee 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, that such Paying Agent will

(1) hold all sums held by it for the payment of principal of (and premium or Make-Whole Amount, if any) or interest on Securities in trust for the benefit of the Persons entitled thereto until such sums shall be paid to such Persons or otherwise disposed of as herein provided;

(2) give the Trustee notice of any default by the Company (or any other obligor upon the Securities) in the making of any such payment of principal (and premium or Make-Whole Amount, if any) or interest on the Securities of that series; and

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

The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, 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; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such sums.

Except as otherwise provided in the Securities of any series, and subject to applicable laws, 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 or Make-Whole Amount, if any) or interest on any Security of any series and remaining unclaimed for two years after such principal (and premium or Make-Whole Amount, if any) or interest has become due and payable shall be paid to the Company upon Company Request 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 principal of (and premium or Make-Whole Amount, if any) or interest on any Security, 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 an Authorized Newspaper, 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 1004 Existence. Subject to Article Eight, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, all material rights (by articles of incorporation, by-laws and statute) and material franchises; provided, however, that the Company shall not be required to preserve any such right or franchise if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company.

SECTION 1005 Maintenance of Properties. The Company will cause all of its material properties used or useful in the conduct of its business or the business of any Subsidiary to be maintained and kept in good condition, repair and working order, normal wear and tear, casualty and condemnation excepted, and supplied with all necessary equipment and will cause to be made all necessary repairs, renewals, replacements, betterments and improvements thereof (and the Company may take out of service for a period of time, any of its properties that have been condemned or suffered any loss due to casualty in order to make such repairs, betterments and improvements), all as in the judgment of the Company may be necessary so that the business carried on in connection therewith may be properly and advantageously conducted at all times; provided, however, that the Company and its Subsidiaries shall not be prevented from (i) removing permanently any property that has been condemned or suffered a loss due to casualty based on the Company's reasonable judgment that such removal is in the best interest of the Company, or (ii) selling or otherwise disposing of their properties for value in the ordinary course of business.

SECTION 1006 Insurance. The Company will cause each of its and its Subsidiaries' insurable properties to be insured against loss or damage in an amount deemed reasonable by the Board of Directors with insurers of recognized responsibility.

SECTION 1007 Payment of Taxes and Other Claims. The Company will pay or discharge or cause to be paid or discharged, before the same shall become delinquent, (1) all taxes, assessments and governmental charges levied or imposed upon it or any Subsidiary or upon the income, profits or property of the Company or any Subsidiary, and (2) all lawful claims for labor, materials and supplies which, if unpaid, might by law become a lien upon the property of the Company or any Subsidiary; provided, however, that the Company shall not be required to pay or discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings.

SECTION 1008 Statement as to Compliance. The Company will deliver to the Trustee, within 120 days after the end of each fiscal year, a brief certificate from the principal executive officer, principal financial officer or principal accounting officer as to his or her knowledge of the Company's compliance with all conditions and covenants under this Indenture and, in the event of any noncompliance, specifying such noncompliance and the nature and status thereof. For purposes of this Section 1008, such compliance shall be determined without regard to any period of grace or requirement of notice under this Indenture.

SECTION 1009 Waiver of Certain Covenants. The Company may omit in any particular instance to comply with any term, provision or condition set forth in Sections 1004 to 1008, inclusive, if before or after the time for such compliance the Holders of at least a majority in principal amount of all outstanding Securities of such series, by Act of such Holders, either waive such compliance in such instance or generally waive 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, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

## ARTICLE 11 REDEMPTION OF SECURITIES

SECTION 1101 Applicability of Article. Securities of any series which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article.

SECTION 1102 Election to Redeem; Notice to Trustee. The election of the Company to redeem any Securities shall be evidenced by or pursuant to a Board Resolution. In case of any redemption at the election of the Company of less than all of the Securities of any series, the Company shall, at least 45 days prior to the giving of the notice of redemption in Section 1104 (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee of such Redemption Date and of the principal amount of Securities of such series to be redeemed. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officers' Certificate evidencing compliance with such restriction.

SECTION 1103 Selection by Trustee of Securities to Be Redeemed. If less than all the Securities of any series issued on the same day with the same terms are to be redeemed, the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series issued on such date with the same terms not previously called for redemption, by such method as the Trustee shall deem fair and appropriate and which may provide for the selection for redemption of portions (equal to the minimum authorized denomination for Securities of that series or any integral multiple thereof) of the principal amount of Securities of such series of a denomination larger than the minimum authorized denomination for Securities of that series.

The Trustee shall promptly notify the Company and the Security Registrar (if other than itself) in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the principal amount thereof to be redeemed.

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 which has been or is to be redeemed.

SECTION 1104 Notice of Redemption. Notice of redemption shall be given in the manner provided in Section 106, not less than 30 days nor more than 60 days prior to the Redemption Date, unless a shorter period is specified by the terms of such series established pursuant to Section 301, to each Holder of Securities to be redeemed, but failure to give such notice in the manner herein provided to the Holder of any Security designated for redemption as a whole or in part, or any defect in the notice to any such Holder, shall not affect the validity of the proceedings for the redemption of any other such Security or portion thereof.

Any notice that is mailed to the Holders of Registered Securities in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the Holder receives the notice.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price, accrued interest to the Redemption Date payable as provided in Section 1106, if any,
- (3) if less than all Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amount) of the particular Security or Securities to be redeemed,
- (4) in case any Security is to be redeemed in part only, the notice which relates to such Security shall state that on and after the Redemption Date, upon surrender of such Security, the holder will receive, without a charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed,

(5) that on the Redemption Date the Redemption Price and accrued interest to the Redemption Date payable as provided in Section 1106, if any, will become due and payable upon each such Security, or the portion thereof, to be redeemed and, if applicable, that interest thereon shall cease to accrue on and after said date,

(6) the Place or Places of Payment where such Securities, together in the case of Bearer Securities with all coupons appertaining thereto, if any, maturing after the Redemption Date, are to be surrendered for payment of the Redemption Price and accrued interest, if any, or for conversion,

(7) that the redemption is for a sinking fund, if such is the case,

(8) that, unless otherwise specified in such notice, Bearer Securities of any series, if any, surrendered for redemption must be accompanied by all coupons maturing subsequent to the date fixed for redemption or the amount of any such missing coupon or coupons will be deducted from the Redemption Price, unless security or indemnity satisfactory to the Company, the Trustee for such series and any Paying Agent is furnished,

(9) if Bearer Securities of any series are to be redeemed and any Registered Securities of such series are not to be redeemed, and if such Bearer Securities may be exchanged for Registered Securities not subject to redemption on this Redemption Date pursuant to Section 305 or otherwise, the last date, as determined by the Company, on which such exchanges may be made,

(10) the CUSIP number of such Security, if any, and

(11) if applicable, that a Holder of Securities who desires to convert Securities for redemption must satisfy the requirements for conversion contained in such Securities, the then existing conversion price or rate, the place or places where such Securities may be surrendered for conversion, and the date and time when the option to convert shall expire.

Notice of redemption of Securities to be redeemed at the election of the Company 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.

**SECTION 1105 Deposit of Redemption Price.** On or prior to any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, which it may not do in the case of a sinking fund payment under Article Twelve, segregate and hold in trust as provided in Section 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay on the Redemption Date the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof which are to be redeemed on that date.

If any Securities called for redemption are converted, any money deposited with the Trustee or with any Paying Agent or so segregated and held in trust for the redemption of such Security

shall be paid to the Company upon Company Request or, if then held by the Company, shall be discharged from such trust.

**SECTION 1106 Securities Payable on Redemption Date.** Notice of redemption having been given as aforesaid, the Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) (together with accrued interest, if any, to the Redemption Date), and from and after such date (unless the Company shall default in the payment of the Redemption Price and accrued interest) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be redeemed, except to the extent provided below, shall be void. Upon surrender of any such Security for redemption in accordance with said notice, together with all coupons, if any, appertaining thereto maturing after the Redemption Date, such Security shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date; provided, however, that installments of interest on Bearer Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of coupons for such interest; and provided further that except as otherwise provided with respect to Securities convertible into the Company's Common Stock or Preferred Stock, installments of interest on Registered Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for redemption shall not be accompanied by all appurtenant coupons maturing after the Redemption Date, such Security may be paid after deducting from the Redemption Price an amount equal to the face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made from the Redemption Price, such Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal (and premium or Make-Whole Amount, if any) shall, until paid, bear interest from the Redemption Date at the rate borne by the Security.

**SECTION 1107 Securities Redeemed in Part.** Any Registered Security which is to be redeemed only in part (pursuant to the provisions of this Article or of Article Twelve) shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the

Trustee duly executed by, the Holder thereof or his 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 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. If a Global Security is so surrendered, the Company shall execute and the Trustee shall authenticate and deliver to the depository, 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.

## **ARTICLE 12 SINKING FUNDS**

SECTION 1201 Applicability of Article. The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of a series except as otherwise specified as contemplated by Section 301 for Securities of such series.

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 such Securities of any series is herein referred to as an “optional sinking fund payment.” If provided for by the terms of any Securities of any series, the cash amount of any mandatory sinking fund payment may be subject to reduction as provided in Section 1202. Each sinking fund payment shall be applied to the redemption of Securities of any series as provided for by the terms of Securities of such series.

SECTION 1202 Satisfaction of Sinking Fund Payments with Securities. The Company may, in satisfaction of all or any part of any mandatory sinking fund payment with respect to the Securities of a series, (1) deliver Outstanding Securities of such series (other than any previously called for redemption) together in the case of any Bearer Securities of such series with all unmatured coupons appertaining thereto and (2) apply as a credit Securities of such series which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, as provided for by the terms of such Securities, or which have otherwise been acquired by the Company; provided that such Securities so delivered or applied as a credit have not been previously so credited. Such Securities shall be received and credited for such purpose by the Trustee at the applicable 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.

SECTION 1203 Redemption of Securities for Sinking Fund. Not less than 60 days prior to each sinking fund payment date for Securities of any series, the Company will deliver to the Trustee an Officers’ Certificate specifying the amount of the next ensuing mandatory sinking fund payment for that series pursuant to the terms of that series, the portion thereof, if any, which is to be satisfied by payment of cash in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) and the portion thereof, if any, which is to be satisfied by delivering and crediting Securities of that series

pursuant to Section 1202, and the optional amount, if any, to be added in cash to the next ensuing mandatory sinking fund payment, and will also deliver to the Trustee any Securities to be so delivered and credited. If such Officers' Certificate shall specify an optional amount to be added in cash to the next ensuing mandatory sinking fund payment, the Company shall thereupon be obligated to pay the amount therein specified. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 1103 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 1104. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 1106 and 1107.

### **ARTICLE 13 REPAYMENT AT THE OPTION OF HOLDERS**

SECTION 1301 Applicability of Article. Repayment of Securities of any series before their Stated Maturity at the option of Holders thereof shall be made in accordance with the terms of such Securities, if any, and (except as otherwise specified by the terms of such series established pursuant to Section 301) in accordance with this Article.

SECTION 1302 Repayment of Securities. Securities of any series subject to repayment in whole or in part at the option of the Holders thereof will, unless otherwise provided in the terms of such Securities, be repaid at a price equal to the principal amount thereof, together with interest, if any, thereon accrued to the Repayment Date specified in or pursuant to the terms of such Securities. The Company covenants that on or prior to the Repayment Date it will 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 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (or, if so provided by the terms of the Securities of any series, a percentage of the principal) of, and (except if the Repayment Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof, as the case may be, to be repaid on such date.

SECTION 1303 Exercise of Option. Securities of any series subject to repayment at the option of the Holders thereof will contain an "Option to Elect Repayment" form on the reverse of such Securities. In order for any Security to be repaid at the option of the Holder, the Trustee must receive at the Place of Payment therefor specified in the terms of such Security (or at such other place or places of which the Company shall from time to time notify the Holders of such Securities) not earlier than 60 days nor later than 30 days prior to the Repayment Date (1) the Security so providing for such repayment together with the "Option to Elect Repayment" form on the reverse thereof duly completed by the Holder (or by the Holder's attorney duly authorized in writing) or (2) a telegram, telex, facsimile transmission or a letter from a member of a national securities exchange, or the FINRA, or a commercial bank or trust company in the United States setting forth the name of the Holder of the Security, the principal amount of the Security, the principal amount of the Security to be repaid, the CUSIP number, if any, or a description of the tenor and terms of the Security, a statement that the option to elect repayment is being exercised thereby and a guarantee that the Security to be repaid, together with the duly completed form



entitled "Option to Elect Repayment" on the reverse of the Security, will be received by the Trustee not later than the fifth Business Day after the date of such telegram, telex, facsimile transmission or letter; provided, however, that such telegram, telex, facsimile transmission or letter shall only be effective if such Security and form duly completed are received by the Trustee by such fifth Business Day. If less than the entire principal amount of such Security is to be repaid in accordance with the terms of such Security, the principal amount of such Security to be repaid, in increments of the minimum denomination for Securities of such series, and the denomination or denominations of the Security or Securities to be issued to the Holder for the portion of the principal amount of such Security surrendered that is not to be repaid, must be specified. The principal amount of any Security providing for repayment at the option of the Holder thereof may not be repaid in part if, following such repayment, the unpaid principal amount of such Security would be less than the minimum authorized denomination of Securities of the series of which such Security to be repaid is a part. Except as otherwise may be provided by the terms of any Security providing for repayment at the option of the Holder thereof, exercise of the repayment option by the Holder shall be irrevocable unless waived by the Company.

**SECTION 1304 When Securities Presented for Repayment Become Due and Payable.** If Securities of any series providing for repayment at the option of the Holders thereof shall have been surrendered as provided in this Article and as provided by or pursuant to the terms of such Securities, such Securities or the portions thereof, as the case may be, to be repaid shall become due and payable and shall be paid by the Company on the Repayment Date therein specified, and on and after such Repayment Date (unless the Company shall default in the payment of such Securities on such Repayment Date) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be repaid, except to the extent provided below, shall be void. Upon surrender of any such Security for repayment in accordance with such provisions, together with all coupons, if any, appertaining thereto maturing after the Repayment Date, the principal amount of such Security so to be repaid shall be paid by the Company, together with accrued interest, if any, to the Repayment Date; provided, however, that coupons whose Stated Maturity is on or prior to the Repayment Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified pursuant to Section 301, only upon presentation and surrender of such coupons; and provided further that, in the case of Registered Securities, installments of interest, if any, whose Stated Maturity is on or prior to the Repayment Date shall be payable (but without interest thereon, unless the Company shall default in the payment thereof) to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for repayment shall not be accompanied by all appurtenant coupons maturing after the Repayment Date, such Security may be paid after deducting from the amount payable therefor as provided in Section 1302 an amount equal to the face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made as provided in the preceding sentence, such

70

---

Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If the principal amount of any Security surrendered for repayment shall not be so repaid upon surrender thereof, such principal amount (together with interest, if any, thereon accrued to such Repayment Date) shall, until paid, bear interest from the Repayment Date at the rate of interest or Yield to Maturity (in the case of Original Issue Discount Securities) set forth in such Security.

**SECTION 1305 Securities Repaid in Part.** Upon surrender of any Registered Security which is to be repaid in part only, the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security, without service charge and at the expense of the Company, a new Registered Security or Securities of the same series, of any authorized denomination specified by the Holder, in an aggregate principal amount equal to and in exchange for the portion of the principal of such Security so surrendered which is not to be repaid.

## **ARTICLE 14 DEFEASANCE AND COVENANT DEFEASANCE**

**SECTION 1401 Applicability of Article; Company's Option to Effect Defeasance or Covenant Defeasance.** If, pursuant to Section 301, provision is made for either or both of (a) Defeasance of the Securities of or within a series under Section 1402 or (b) Covenant Defeasance of the Securities of or within a series under Section 1403, then the provisions of such Section or Sections, as the case may be, together with the other provisions of this Article (with such modifications thereto as may be specified pursuant to Section 301 with respect to any Securities), shall be applicable to such Securities and any coupons appertaining thereto, and the Company may at its option by Board Resolution, at any time, with respect to such Securities and any coupons appertaining thereto, elect to have Section 1402 (if applicable) or Section 1403 (if applicable) be applied to such Outstanding Securities and any coupons appertaining thereto upon compliance with the conditions set forth below in this Article.

**SECTION 1402 Defeasance and Discharge.** Upon the Company's exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be deemed to have been discharged from its obligations with respect to such Outstanding Securities and any coupons appertaining thereto on the date the conditions set forth in Section 1404 are satisfied (hereinafter, "Defeasance"). For this purpose, such Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by such Outstanding Securities and any coupons appertaining thereto, which shall thereafter be deemed to be "Outstanding" only for the purposes of Section 1405 and the other Sections of this Indenture referred to in clauses (A) and (B) below, and to have satisfied all of its other obligations under such Securities and any coupons appertaining thereto and this Indenture insofar as such Securities and any coupons appertaining thereto are concerned (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), except for the following which shall survive until otherwise terminated or discharged hereunder: (A) the rights of Holders of such Outstanding Securities and any coupons appertaining thereto to receive, solely from the trust fund described in Section 1404 and as more fully set forth in such Section,

71

---

payments in respect of the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto when such payments are due, (B) the Company's obligations with respect to such Securities under Sections 305, 306, 1002 and 1003 and to the extent provided with respect to the Securities of such series, Article 17, and the Company's obligations under Section 606 hereof (C) the rights, powers, trusts, duties and immunities of the Trustee hereunder and (D) this Article. Subject to compliance with this Article Fourteen, the Company may exercise its option under this Section notwithstanding the prior exercise of its option under Section 1403 with respect to such Securities and any coupons appertaining thereto.

**SECTION 1403 Covenant Defeasance.** Upon the Company's exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be released from its obligations under Sections 1004 to 1008, inclusive, and, if specified pursuant to Section 301, its obligations under any other covenant contained herein or in any indenture supplemental hereto, with respect to such Outstanding Securities and any coupons appertaining thereto on and after the date the conditions set forth in Section 1404 are satisfied (hereinafter, "Covenant Defeasance"), and such Securities and any coupons appertaining thereto shall thereafter be deemed to be not "Outstanding" for the purposes of any direction, waiver, consent or declaration or Act of Holders (and the consequences of any thereof) in connection with Sections 1004 to 1008, inclusive, or such other covenant, but shall continue to be deemed "Outstanding" for all other purposes hereunder. For this purpose, such Covenant Defeasance means that, with respect to such Outstanding Securities and any coupons appertaining thereto, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such Section or such other covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such Section or such other covenant or by reason of reference in any such Section or such other covenant to any other provision herein or in any other document and such omission to comply shall not constitute a default or an Event of Default under Section 501(4) or 501(8) or otherwise, as the case may be, but, except as specified above, the remainder of this Indenture and such Securities and any coupons appertaining thereto shall be unaffected thereby.

**SECTION 1404 Conditions to Defeasance or Covenant Defeasance.** The following shall be the conditions to application of Section 1402 or Section 1403 to any Outstanding Securities of or within a series and any coupons appertaining thereto:

(a) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee satisfying the requirements of Section 607 who shall agree to comply with the provisions of this Article Fourteen applicable to it) as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefit of the Holders of such Securities and any coupons appertaining thereto, (1) an amount in such currency, currencies or currency unit in which such Securities and any coupons appertaining thereto are then specified as payable at Stated Maturity, or (2) Government Obligations applicable to such Securities and coupons appertaining thereto (determined on the basis of the currency, currencies or currency unit in which such Securities and coupons appertaining thereto are then specified as payable at Stated Maturity) which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than the due date of any payment of principal of (and premium or Make-Whole

Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto, money in an amount, or (3) a combination thereof, in any case, in an amount, sufficient, without consideration of any reinvestment of such principal and interest, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay and discharge, and which shall be applied by the Trustee (or other qualifying trustee) to pay and discharge, (i) the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Outstanding Securities and any coupons appertaining thereto on the Stated Maturity of such principal or installment of principal or interest and (ii) any mandatory sinking fund payments or analogous payments applicable to such Outstanding Securities and any coupons appertaining thereto on the day on which such payments are due and payable in accordance with the terms of this Indenture and of such Securities and any coupons appertaining thereto.

(b) Such Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, this Indenture or any other material agreement or instrument to which the Company is a party or by which it is bound.

(c) No Event of Default or event which with notice or lapse of time or both would become an Event of Default with respect to such Securities and any coupons appertaining thereto shall have occurred and be continuing on the date of such deposit or, insofar as Sections 501(6) and 501(7) are concerned, at any time during the period ending on the 91st day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until the expiration of such period).

(d) In the case of an election under Section 1402, the Company shall have delivered to the Trustee an Opinion of Counsel stating that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling, or (ii) since the date of execution of this Indenture, there has been a change in the applicable Federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Defeasance had not occurred.

(e) In the case of an election under Section 1403, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Covenant Defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred.

(f) The Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent to the Defeasance under Section 1402 or the Covenant Defeasance under Section 1403 (as the case may be) have been complied with and an Opinion of Counsel to the effect that either (i) as a result of a deposit pursuant to subsection (a) above and the related exercise of the Company's option under Section 1402 or Section 1403 (as the case may be), registration is not required under the Investment

Company Act of 1940, as amended, by the Company, with respect to the trust funds representing such deposit or by the Trustee for such trust funds or (ii) all necessary registrations under said Act have been effected.

(g) Notwithstanding any other provisions of this Section, such Defeasance or Covenant Defeasance shall be effected in compliance with any additional or substitute terms, conditions or limitations which may be imposed on the Company in connection therewith pursuant to Section 301.

(h) The payment of amounts payable to the Trustee pursuant to this Indenture shall be paid or provided for to the reasonable satisfaction of the Trustee.

SECTION 1405 Deposited Money and Government Obligations to Be Held in Trust; Other Miscellaneous Provisions. Subject to the provisions of the last paragraph of Section 1003, all money and Government Obligations (or other property as may be provided pursuant to Section 301) (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section 1405, the "Trustee") pursuant to Section 1404 in respect of any Outstanding Securities of any series and any coupons appertaining thereto shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities and any coupons appertaining thereto and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Holders of such Securities and any coupons appertaining thereto of all sums due and to become due thereon in respect of principal (and premium or Make-Whole Amount, if any) and interest, but such money need not be segregated from other funds except to the extent required by law.

Unless otherwise specified with respect to any Security pursuant to Section 301, if, after a deposit referred to in Section 1404(a) has been made, (a) the Holder of a Security in respect of which such deposit was made is entitled to, and does, elect pursuant to Section 301 or the terms of such Security to receive payment in a currency or currency unit other than that in which the deposit pursuant to Section 1404(a) has been made in respect of such Security, or (b) a Conversion Event occurs in respect of the currency or currency unit in which the deposit pursuant to Section 1404(a) has been made, the indebtedness represented by such Security and any coupons appertaining thereto shall be deemed to have been, and will be, fully discharged and satisfied through the payment of the principal of (and premium or Make-Whole Amount, if any), and interest, if any, on such Security as the same becomes due out of the proceeds yielded by converting (from time to time as specified below in the case of any such election) the amount or other property deposited in respect of such Security into the currency or currency unit in which such Security becomes payable as a result of such election or Conversion Event based on the applicable market exchange rate for such currency or currency unit in effect on the second Business Day prior to each payment date, except, with respect to a Conversion Event, for such currency or currency unit in effect (as nearly as feasible) at the time of the Conversion Event.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the Government Obligations deposited pursuant to Section 1404 or the principal and interest received in respect thereof other than any such tax, fee or other charge

which by law is for the account of the Holders of such Outstanding Securities and any coupons appertaining thereto.

Anything in this Article to the contrary notwithstanding, subject to Section 606, the Trustee shall deliver or pay to the Company from time to time upon Company Request any money or Government Obligations (or other property and any proceeds therefrom) held by it as provided in Section 1404 which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, are in excess of the amount thereof which would then be required to be deposited to effect a Defeasance or Covenant Defeasance, as applicable, in accordance with this Article.

## **ARTICLE 15 MEETINGS OF HOLDERS OF SECURITIES**

SECTION 1501 Purposes for Which Meetings May Be Called. A meeting of Holders of Securities of any series may be called at any time and from time to time pursuant to this Article to make, give or take any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be made, given or taken by Holders of Securities of such series.

SECTION 1502 Call, Notice and Place of Meetings.

(a) The Trustee may at any time call a meeting of Holders of Securities of any series for any purpose specified in Section 1501, to be held at such time and at such place as the Trustee shall determine. Notice of every meeting of Holders of Securities of any 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 given, in the manner provided in Section 106, not less than 20 nor more than 180 days prior to the date fixed for the meeting.

(b) In case at any time the Company, pursuant to a Board Resolution, or the Holders of at least 25% in principal amount of the Outstanding Securities of any series shall have requested the Trustee to call a meeting of the Holders of Securities of such series for any purpose specified in Section 1501, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have made the first publication of the notice of such meeting within 20 days after receipt of such request or shall not thereafter proceed to cause the meeting to be held as provided herein, then the Company or the Holders of Securities of such series in the amount above specified, as the case may be, may determine the time and the place for such meeting and may call such meeting for such purposes by giving notice thereof as provided in subsection (a) of this Section.

SECTION 1503 Persons Entitled to Vote at Meetings. To be entitled to vote at any meeting of Holders of Securities of any series, a Person shall be (1) a Holder of one or more Outstanding Securities of such series, or (2) a Person appointed by an instrument in writing as proxy for a Holder or Holders of one or more Outstanding Securities of such series by such Holder or Holders. The only Persons who shall be entitled to be present or to speak at any meeting of Holders of Securities of any series shall be the Persons entitled to vote at such

meeting and their counsel, any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

SECTION 1504 Quorum; Action. The Persons entitled to vote a majority in principal amount of the Outstanding Securities of a series shall constitute a quorum for a meeting of Holders of Securities of such series; provided, however, that if any action is to be taken at such meeting with respect to a consent or waiver which this Indenture expressly provides may be given by the Holders of not less than a specified percentage in principal amount of the Outstanding Securities of a series, the Persons entitled to vote such specified percentage in principal amount of the Outstanding Securities of such series shall constitute a quorum. In the absence of a quorum within 30 minutes after 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 of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such meeting. In the absence of a quorum at the reconvening of any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than 10 days; at the reconvening of any meeting adjourned or further adjourned for lack of a quorum, the Persons entitled to vote 25% in aggregate principal amount of the then Outstanding Securities shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. Notice of the reconvening of any adjourned meeting shall be given as provided in Section 1502(a), except that such notice need be given only once not less than five days prior to the date on which the meeting is scheduled to be reconvened.

Except as limited by the proviso to Section 902, any resolution presented to a meeting or adjourned meeting duly reconvened at which a quorum is present as aforesaid may be adopted by the affirmative vote of the Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities represented at such meeting; provided, however, that, except as limited by the proviso to Section 902, any resolution with respect to any request, demand, authorization, direction, notice, consent, waiver or other action which this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage, which is less than a majority, in principal amount of the Outstanding Securities of a series may be adopted at a meeting or an adjourned meeting duly reconvened and at which a quorum is present as aforesaid by the affirmative vote of the Holders of such specified percentage in principal amount of the Outstanding Securities of that series.

Any resolution passed or decision taken at any meeting of Holders of Securities of any series duly held in accordance with this Section shall be binding on all the Holders of Securities of such series and the related coupons, whether or not present or represented at the meeting.

Notwithstanding the foregoing provisions of this Section 1504, if any action is to be taken at a meeting of Holders of Securities of any series with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage in principal amount of all Outstanding Securities affected thereby, or of the Holders of such series and one or more additional series:

- (i) there shall be no minimum quorum requirement for such meeting; and

(ii) the principal amount of the Outstanding Securities of such series that vote in favor of such request, demand, authorization, direction, notice, consent, waiver or other action shall be taken into account in determining whether such request, demand, authorization, direction, notice, consent, waiver or other action has been made, given or taken under this Indenture.

SECTION 1505 Determination of Voting Rights; Conduct and Adjournment of Meetings.

(a) Notwithstanding any provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders of Securities of a series in regard to proof of the holding of Securities of such series 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 appropriate. Except as otherwise permitted or required by any such regulations, the holding of Securities shall be proved in the manner specified in Section 104 and the appointment of any proxy shall be proved in the manner specified in Section 104 or by having the signature of the Person executing the proxy witnessed or guaranteed by any trust company, bank or banker authorized by Section 104 to certify to the holding of Bearer Securities. Such regulations may provide that written instruments appointing proxies, regular on their face, may be presumed valid and genuine without the proof specified in Section 104 or other proof.

(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 Holders of Securities as provided in Section 1502(b), in which case the Company or the Holders of Securities of the series calling the meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting.

(c) At any meeting each Holder of a Security of such series or proxy shall be entitled to one vote for each \$1,000 principal amount of the Outstanding Securities of such series 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, except as a Holder of a Security of such series or proxy.

(d) Any meeting of Holders of Securities of any series duly called pursuant to Section 1502 at which a quorum is present may be adjourned from time to time by Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting, and the meeting may be held as so adjourned without further notice.

SECTION 1506 Counting Votes and Recording Action of Meetings. The vote upon any resolution submitted to any meeting of Holders of Securities of any 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 and serial numbers of the

Outstanding 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, at least in duplicate, of the proceedings of each meeting of Holders of Securities of any Series 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 fact, setting forth a copy of the notice of the meeting and showing that said notice was given as provided in Section 1502 and, if applicable, Section 1504. Each copy shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one such copy shall be delivered to the Company and another to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting. Any record so signed and verified shall be conclusive evidence of the matters therein stated.

## ARTICLE 16 SUBORDINATION OF SECURITIES

SECTION 1601 Agreement to Subordinate. Notwithstanding anything in this Indenture to the contrary (other than Article Four of this Indenture), the Company covenants and agrees, and each Holder of a Security, by such Holder's acceptance thereof, likewise covenants and agrees, that, to the extent and in the manner hereinafter set forth in this Article, the Indebtedness represented by the Securities and the payment of any Obligations with respect to each and all of the Securities are hereby expressly made subordinate and subject in right of payment to the prior payment in full of all Senior Indebtedness.

SECTION 1602 Payment Over of Proceeds upon Dissolution, Etc. In the event of (a) any insolvency or bankruptcy case or Proceeding, or any receivership, liquidation, reorganization or other similar case or Proceeding in connection therewith, relative to the Company or to its creditors, as such, or to its assets, or (b) any liquidation, dissolution or other winding up of the Company, whether voluntary or involuntary and whether or not involving insolvency or bankruptcy, or (c) any assignment for the benefit of creditors or any other marshaling of assets and liabilities of the Company, then and in any such event specified in (a), (b) or (c) above (each such event, if any, herein sometimes referred to as a "Proceeding")

(1) the holders of Senior Indebtedness shall first be entitled to receive payment in full of all Obligations due or to become due on or in respect of all Senior Indebtedness, or provision shall be made for such payment in cash or cash equivalents or otherwise in a manner satisfactory to the holders of Senior Indebtedness, before the Holders of the Securities are entitled to receive any payment or distribution on account of principal of or premium, if any, or interest on or other Obligations in respect of the Securities or on account of any purchase, redemption or other acquisition of Securities by the Company or any Subsidiary (individually and collectively, a "Securities Payment"), and

(2) any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities (other than Capital Stock or securities of the Company as reorganized or readjusted, or securities of the Company or any other corporation provided for by a plan of reorganization or readjustment, the payment of which is subordinate, at



least to the extent provided in this Article Sixteen with respect to the Securities, to the payment in full, without diminution or modification by such plan, of all Senior Indebtedness), to which the Holders would be entitled except for the provisions of this Article Sixteen, shall be paid by the liquidating trustee or agent or other person making such a payment or distribution, directly to the holders of Senior Indebtedness) (or their representative(s) or trustee(s) acting on their behalf), ratably according to the aggregate amounts remaining unpaid on account of the principal of or interest on and other amounts due 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.

In the event that, notwithstanding the foregoing provisions of this Section 1602, the Trustee or the Holder of any Security shall have received any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities (other than Capital Stock or securities of the Company as reorganized or readjusted, or securities of the Company or any other corporation provided for by a plan of reorganization or readjustment, the payment of which is subordinate, at least to the extent provided in this Article with respect to the Securities, to the payment in full, without diminution or modification by such plan, of Senior Indebtedness), before all Senior Indebtedness is paid in full or payment thereof provided for in cash or cash equivalents or otherwise in a manner satisfactory to the holders of Senior Indebtedness, such payment or distribution shall be held in trust for the benefit of, and be paid over to, the holders of the Senior Indebtedness remaining unpaid (or their representative(s) or trustee(s) acting on their behalf), ratably as aforesaid, for application to the payment of such Senior Indebtedness until 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.

The consolidation of the Company with, or the merger of the Company into, another Person or the liquidation or dissolution of the Company following the conveyance or transfer of all or substantially all of its properties and assets as an entirety to another Person upon the terms and conditions set forth in Article Eight shall not be deemed a Proceeding for the purposes of this Section 1602 if the Person formed by such consolidation or into which the Company is merged or the Person which acquires by conveyance or transfer such properties and assets as an entirety, as the case may be, shall, as a part of such consolidation, merger, conveyance or transfer, comply with the conditions set forth in Article Eight.

SECTION 1603 No Payment When Senior Indebtedness in Default. Anything in this Indenture to the contrary notwithstanding, no payment on account of principal of or redemption of, interest on or other amounts due on the Securities, and no redemption, purchase, or other acquisition of the Securities, shall be made by or on behalf of the Company (i) unless full payment of amounts then due for principal and interest and of all other obligations then due on all Senior Indebtedness has been made or duly provided for pursuant to the terms of the instrument governing such Senior Indebtedness, (ii) if, at the time of such payment, redemption, purchase or other acquisition, or immediately after giving effect thereto, there shall exist under any Senior Indebtedness, or any agreement pursuant to which any Senior Indebtedness is issued, any default, which default shall not have been cured or waived and which default shall have resulted in the full amount of such Senior Indebtedness being declared due and payable or (iii) if, at the time of such payment, redemption, purchase or other acquisition, the Trustee shall have

received written notice from the holder or holders of any Senior Indebtedness or their representative or representatives (a "Payment Blockage Notice") that there exists under such Senior Indebtedness, or any agreement pursuant to which such Senior Indebtedness is issued, any default, which default shall not have been cured or waived, permitting the holders thereof to declare the full amount of such Senior Indebtedness due and payable, but only for the period (the "Payment Blockage Period") commencing on the date of receipt of the Payment Blockage Notice and ending (unless earlier terminated by notice given to the Trustee by the Holders of such Senior Indebtedness) on the earlier of (A) the date on which such event of default shall have been cured or waived or (B) 180 days from the receipt of the Payment Blockage Notice. Upon termination of a Payment Blockage Period, payments on account of principal of or interest on the Securities and redemptions, purchases or other acquisitions may be made by or on behalf of the Company. Notwithstanding anything herein to the contrary, (A) only one Payment Blockage Notice may be given during any period of 360 consecutive days with respect to the same event of default and any other events of default on the same issue of Senior Indebtedness existing and known to the person giving such notice at the time of such notice and (B) no new Payment Blockage Period may be commenced by the holder or holders of the same issue of Senior Indebtedness or their representative or representatives during any period of 360 consecutive days unless all events of default which were the object of the immediately preceding Payment Blockage Notice, and any other event of default on the same issue of Senior Indebtedness existing and known to the person giving such notice at the time of such notice, have been cured or waived.

In the event that, notwithstanding the provisions of this Section 1603, payments are made by or on behalf of the Company in contravention of the provisions of this Section 1603, such payments shall be held by the Trustee, any Paying Agent or the Holders, as applicable, in trust for the benefit of, and shall be paid over to and delivered to, the holders of Senior Indebtedness or their representative or the trustee under the indenture or other agreement (if any), pursuant to which any instruments evidencing any Senior Indebtedness may have been issued, as their respective interests may appear, for application to the payment of all Senior Indebtedness remaining unpaid to the extent necessary to pay all Senior Indebtedness in full in accordance with the terms of such Senior Indebtedness, after giving effect to any concurrent payment or distribution to or for the holders of Senior Indebtedness.

The provisions of this Section shall not apply to any payment with respect to which Section 1602 would be applicable.

SECTION 1604 Reliance by Senior Indebtedness on Subordination Provisions. Each Holder of any Security by his acceptance thereof acknowledges and agrees that the foregoing subordination provisions are, and are intended to be, an inducement and a consideration for each holder of any Senior Indebtedness, whether such Senior Indebtedness was created or acquired before or after the issuance of the Securities, to acquire and continue to hold, or to continue to hold, such Senior Indebtedness, and such holder of Senior Indebtedness shall be deemed conclusively to have relied on such subordination provisions in acquiring and continuing to hold or in continuing to hold such Senior Indebtedness.

SECTION 1605 Subrogation to Rights of Holders of Senior Indebtedness. Subject to the payment in full of all Obligations due or to become due on or in respect of Senior Indebtedness,

80

---

or the provision for such payment in cash or cash equivalents or otherwise in a manner satisfactory to the holders of Senior Indebtedness, the Holders of the Securities shall be subrogated to the extent of the payments or distributions made to the holders of such Senior Indebtedness pursuant to the provisions of this Article Sixteen to the rights of the holders of such Senior Indebtedness to receive payments and distributions of cash, property and securities applicable to the Senior Indebtedness until the principal of and premium, if any, and interest on the Securities shall be paid in full. For purposes of such subrogation, no payments or distributions to the holders of the Senior Indebtedness of any cash, property or securities to which the Holders of the Securities or the Trustee would be entitled except for the provisions of this Article Sixteen, and no payments over pursuant to the provisions of this Article Sixteen to the holders of Senior Indebtedness by Holders of the Securities or the Trustee, shall, as among the Company, its creditors other than holders of Senior Indebtedness and the Holders of the Securities, be deemed to be a payment or distribution by the Company to or on account of the Senior Indebtedness.

SECTION 1606 Provisions Solely to Define Relative Rights. The provisions of this Article Sixteen 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 Senior Indebtedness on the other hand. Nothing contained in this Article or elsewhere in this Indenture or in the Securities is intended to or shall (a) impair, as among the Company, its creditors other than holders of Senior Indebtedness and the Holders of the Securities, the obligation of the Company, which is absolute and unconditional (and which, subject to the rights under this Article Sixteen of the holders of Senior Indebtedness, is intended to rank equally with all other general obligations of the Company), to pay to the Holders of the Securities the principal of and premium, if any, and interest on the Securities as and when the same shall become due and payable in accordance with their terms; or (b) affect the relative rights against the Company of the Holders of the Securities and creditors of the Company other than the holders of Senior Indebtedness; or (c) 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 of the holders of Senior Indebtedness to receive cash, property and securities otherwise payable or deliverable to the Trustee or such Holder.

SECTION 1607 Trustee to Effectuate Subordination. Each Holder of a Security by his acceptance thereof authorizes and directs the Trustee on his behalf to take such action as may be necessary or appropriate to effectuate, as between the Holders of the Securities and the holders of Senior Indebtedness, the subordination provided in this Article Sixteen and appoints the Trustee his attorney-in-fact for any and all such purposes, including, in the event of any dissolution, winding up or liquidation or reorganization under any applicable bankruptcy law of the Company (whether in bankruptcy, insolvency or receivership Proceedings or otherwise), the timely filing of a claim for the unpaid balance of such Holder's Securities in the form required in such Proceedings and the causing of such claim to be approved. If the Trustee does not file a claim or proof of debt in the form required in such Proceedings prior to 30 days before the expiration of the time to file such claims or proofs, then the holders of Senior Indebtedness, jointly, or their representatives shall have the right to file an appropriate claim for and on behalf of the Holders and to demand, sue for, collect, receive and receipt for the payments and distributions in respect of the Securities which are required to be paid or delivered to the holders of Senior Indebtedness as provided in this Article Sixteen and to take all such other action in the

81

---

name of the Holders or otherwise, as such holder of Senior Indebtedness or representative thereof may determine to be necessary or appropriate for the enforcement of the provisions of this Article Sixteen.

SECTION 1608 No Waiver of Subordination Provisions. No right of any present or future holder of any Senior Indebtedness to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act on the part of the Company or by any act or failure to act, in good faith, by any such holder or any representative or trustee therefor, or by any non-compliance by the Company with the terms, provisions and covenants of this Indenture, regardless of any knowledge thereof any such holder may have or be otherwise charged with.

Without in any way limiting the generality of the foregoing paragraph, the holders of Senior Indebtedness may, at any time from time to time, without the consent of or notice to the Trustee or the Holders of the Securities, without incurring responsibility to the Holders of the Securities and without impairing or releasing the subordination provided in this Article Sixteen or the obligations hereunder of the Holders of the Securities to the holders of Senior Indebtedness, do any one or more of the following:

- (i) change the manner, place or terms of payment or extend the time of payment of, or renew or alter, Senior Indebtedness, or otherwise amend or supplement in any manner Senior Indebtedness or any instrument evidencing the same or any agreement under which Senior Indebtedness is outstanding;
- (ii) sell, exchange, release or otherwise deal with any property pledged, mortgaged or otherwise securing Senior Indebtedness;
- (iii) release any Person liable in any manner for the collection of Senior Indebtedness and settle or compromise Senior Indebtedness (which, to the extent so settled and compromised, shall be deemed to have been paid in full for all purposes hereof);
- (iv) apply any amounts received to any liability of the Company owing to holders of Senior Indebtedness; and
- (v) exercise or refrain from exercising any rights against the Company and any other Person.

SECTION 1609 Notice to Trustee. The Company shall give prompt written notice to the Trustee of any default or event of default with respect to any Senior Indebtedness or of any fact known to the Company which would prohibit the making of any payment to or by the Trustee in respect of the Securities pursuant to the provisions of this Article Sixteen. Notwithstanding the provisions of this Article Sixteen or any other provision of this Indenture, the Trustee shall not be charged with knowledge of the existence of any facts which would prohibit the making of any payment to or by the Trustee in respect of the Securities, unless and until the Trustee shall have received written notice thereof from the Company or a holder of Senior Indebtedness or from any representative or trustee acting on their behalf; and, prior to the receipt of any such written notice, the Trustee, subject to the provisions of Section 612, shall be entitled in all respects to assume that no such facts exist; provided, however, that if the Trustee shall not have received the

notice provided for in this Section at least three Business Days prior to the date upon which by the terms hereof any money may become payable for any purpose (including, without limitation, the payment of the principal of and premium, if any, or interest on any Security), then, anything herein contained to the contrary notwithstanding, the Trustee shall have full power and authority to receive such money and to apply the same to the purpose for which such money was received and shall not be affected by any notice to the contrary which may be received by it within three Business Days prior to such date. Nothing contained in this Article Sixteen or any other Article of this Indenture or in any of the Securities shall prevent (a) the Company, at any time except during the pendency of any Proceeding, or under the conditions described in Section 1603, from making payments at any time in respect of the Securities, or (b) the application by the Trustee of any money deposited with it hereunder to the payment of or on account of the Securities, or the retention thereof by any Holder, if the Trustee did not have notice, as provided in this Section 1609, that such payment would have been prohibited by the provisions of this Article Sixteen.

Subject to the provisions of Section 612, 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 representative or trustee therefor) to establish that such notice has been given by a holder of Senior Indebtedness (or a trustee therefor). 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 Sixteen, 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 Sixteen, 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 1610 Reliance on Judicial Order or Certificate of Liquidating Agent. Upon any payment or distribution of assets of the Company referred to in this Article Sixteen, the Trustee, subject to the provisions of Section 612, and the Holders of the Securities shall be entitled to rely upon any order or decree entered by any court of competent jurisdiction in which any Proceeding is pending, or a certificate of the trustee in bankruptcy, receiver, liquidating trustee, custodian, 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 the 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.

SECTION 1611 Trustee Not Fiduciary for Holders of Senior Indebtedness. The Trustee shall not be deemed to owe any fiduciary duty to the holders of Senior Indebtedness. Nothing contained in this Article Sixteen or elsewhere in this Indenture, or in any of the Securities, shall prevent the application by the Trustee of any moneys which were deposited with it hereunder, prior to its receipt of written notice of facts which would prohibit such application, for the purpose of the payment of or on account of the principal of or interest on, the Securities unless, prior to the date on which such application is made by the Trustee, the Trustee shall be charged

with notice under Section 1609 hereof of the facts which would prohibit the making of such application.

SECTION 1612 Rights of Trustee as Holder of Senior Indebtedness; Preservation of Trustee's Rights. The Trustee in its individual capacity shall be entitled to all the rights set forth in this Article Sixteen with respect to any Senior Indebtedness which may at any time be held by it, to the same extent as any other holder of Senior Indebtedness, and nothing in this Indenture shall deprive the Trustee of any of its rights as such holder. Nothing in this Article shall apply to claims of, or payments to, the Trustee under or pursuant to Section 606.

SECTION 1613 Article Applicable to Paying Agents. In case at any time any Paying Agent other than the Trustee shall have been appointed by the Company and be then acting hereunder, the term "Trustee" as used in this Article Sixteen shall in such case (unless the context otherwise requires) be construed as extending to and including such Paying Agent within its meaning as fully for all intents and purposes as if such Paying Agent were named in this Article in addition to or in place of the Trustee; provided, however, that Section 1612 shall not apply to the Company or any Affiliate of the Company if it or such Affiliate acts as Paying Agent.

## **ARTICLE 17 CONVERSION OF SECURITIES**

SECTION 1701 Applicability of Article; Conversion Privilege and Conversion Price. Securities of any series which are convertible shall be convertible in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article Seventeen. Subject to and upon compliance with the provisions of this Article Seventeen, at any time during the period specified in the Securities, at the option of the Holder thereof, any Security or any portion of the principal amount thereof which is \$1,000 or an integral multiple of \$1,000 may be converted at the principal amount thereof, or of such portion thereof, into fully paid and nonassessable shares (calculated as to each conversion to the nearest 1/100 of a share) of Common Stock of the Company, at the Conversion Price, determined as hereinafter provided, in effect at the time of conversion. In case a Security or portion thereof is called for redemption, such conversion right in respect of the Security or portion so called shall expire at the close of business on the Business Day immediately preceding the Redemption Date, unless the Company defaults in making the payment due upon redemption, in which case such conversion right shall terminate on the date such default is cured.

The price at which shares of Common Stock shall be delivered upon conversion (herein called the "Conversion Price") of Securities of any series shall be specified in such Securities. The Conversion Price shall be adjusted in certain instances as provided in Section 1704.

In case the Company shall, by dividend or otherwise, declare or make a distribution on its Common Stock referred to in paragraph (4) of Section 1704, the Holder of each Security, upon the conversion thereof pursuant to this Article Seventeen subsequent to the close of business on the date fixed for the determination of stockholders entitled to receive such distribution and prior to the effectiveness of the Conversion Price adjustment in respect of such distribution pursuant to paragraph (4) of Section 1704, shall be entitled to receive for each share of Common Stock into

which such Security is converted, the portion of the evidence of indebtedness, shares of Capital Stock or assets so distributed applicable to one share of Common Stock; provided, however, that, at the election of the Company (whose election shall be evidenced by a Board Resolution filed with the Trustee) with respect to all Holders so converting, the Company may, in lieu of distributing to such Holder any portion of such distribution not consisting of cash or securities of the Company, pay such Holder an amount in cash equal to the fair market value thereof (as determined in good faith by the Board of Directors, whose determination shall be conclusive and described in a Board Resolution filed with the Trustee). If any conversion of a Security entitled to the benefits described in the immediately preceding sentence occurs prior to the payment date for a distribution to holders of Common Stock which the Holder of the Security so converted is entitled to receive in accordance with the immediately preceding sentence, the Company may elect (such election to be evidenced by a Board Resolution filed with the Trustee) to distribute to such Holder a due bill for the evidences of indebtedness, shares of Capital Stock or assets to which such Holder is so entitled, provided that such due bill (i) meets any applicable requirements of the principal over-the-counter market or national securities exchange or other market on which the Common Stock is then traded, and (ii) requires payment or delivery of such evidences of indebtedness or assets no later than the date of payment or delivery thereof to holders of Common Stock receiving such distribution.

**SECTION 1702 Exercise of Conversion Privilege.** In order to exercise the conversion privilege, the Holder of any Security to be converted shall surrender such Security, duly endorsed or assigned to the Company or in blank, at any office or agency maintained by the Company pursuant to Section 1002, accompanied by written notice to the Company at such office or agency that the Holder elects to convert such Security or, if less than the entire principal amount thereof is to be converted, the portion thereof to be converted and shall comply with any additional requirements set forth in such Security. Securities surrendered for conversion during the period from the close of business on any Regular Record Date next preceding any Interest Payment Date to the opening of business on such Interest Payment Date shall (except for Securities the Maturity of which is prior to such Interest Payment Date) be accompanied by payment in funds acceptable to the Company of an amount equal to the interest payable on such Interest Payment Date on the principal amount of Securities being surrendered for conversion and such interest shall be paid on such Interest Payment Date as provided in Section 307. Except as provided in the preceding sentence, no payment or adjustment shall be made upon any conversion on account of any interest accrued on the Securities surrendered for conversion or on account of any dividends on the Common Stock issued upon conversion.

The Company's delivery to the Holder of the fixed number of shares of the Common Stock of the Company (and any cash in lieu of any fractional share of Common Stock) into which the Security is convertible shall be deemed to satisfy the Company's obligation to pay the principal amount of the Security and all accrued interest and original issue discount that has not previously been paid. The shares of Common Stock of the Company so delivered shall be treated as issued first in payment of accrued interest and original issue discount and then in payment of principal. Thus, accrued interest and original issue discount shall be treated as paid, rather than canceled, extinguished or forfeited.

Securities shall be deemed to have been converted immediately prior to the close of business on the day of surrender of such Securities for conversion in accordance with the foregoing

provisions, and at such time the rights of the Holders of such Securities as Holders shall cease, and the Person or Persons entitled to receive the Common Stock issuable upon conversion shall be treated for all purposes as the record holder or holders of such Common Stock at such time. As promptly as practicable on or after the conversion date, the Company shall issue and shall deliver at such office or agency a certificate or certificates for the number of full shares of Common Stock issuable upon conversion, together with payment in lieu of any fraction of a share, as provided in Section 1703.

In the case of any Security which is converted in part only, as promptly as practicable on or after the conversion date the Company shall execute and the Trustee shall authenticate and make available for delivery to the Holder thereof (or the Depository in the case of a Global Security), at the expense of the Company, a new Security or Securities, of authorized denominations in aggregate principal amount equal to the unconverted portion of the principal amount of such Security.

SECTION 1703 Fractions of Shares. No fractional shares of Common Stock shall be issued upon conversion of Securities. If more than one Security shall be surrendered for conversion at one time by the same Holder, the number of full shares of Common Stock which shall be issuable upon conversion thereof shall be computed on the basis of the aggregate principal amount of the Securities (or specified portions thereof) so surrendered. Instead of any fractional share of Common Stock which would otherwise be issuable upon conversion of any Security or Securities (or specified portions thereof), the Company shall pay a cash adjustment (rounded to the nearest cent) in respect of such fraction in an amount equal to the same fraction of the Closing Price per share of the Common Stock on the day of conversion (or, if such day is not a Trading Day, on the Trading Day immediately preceding such day).

SECTION 1704 Adjustment of Conversion Price. The Conversion Price shall be subject to adjustment from time to time as follows:

(1) If the Company pays or makes a dividend or other distribution (a) on its Common Stock exclusively in Common Stock or (b) on any other class of Capital Stock of the Company, which dividend or distribution includes Common Stock of the Company, the Conversion Price in effect at the opening of business on the day following the date fixed for the determination of stockholders entitled to receive such dividend or other distribution (the "Dividend Record Date") shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Dividend Record Date and the denominator shall be the sum of such number of shares and the total number of shares constituting such dividend or other distribution. Such reduction shall become effective immediately after the opening of business on the day following the date fixed for such determination. For the purposes of this paragraph (1), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock. The Company shall not pay any dividend or make any distribution on shares of Common Stock held in the treasury of the Company.

(2) Subject to paragraph (6) of this Section, if the Company pays or makes a dividend or other distribution on its Common Stock consisting exclusively of Short Term Rights (as defined below), or otherwise issues Short Term Rights to all holders of its Common Stock, the Conversion Price in effect at the opening of business on the day following the record date for the determination of holders of Common Stock entitled to receive such Short Term Rights (the “Rights Record Date”) shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of shares of Common Stock of the Company which the aggregate of the offering price of the total number of shares of Common Stock so offered for subscription or purchase would purchase at such current market price and the denominator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of shares of Common Stock so offered for subscription or purchase. Such reduction shall become effective immediately after the opening of business on the day following the Rights Record Date. For the purposes of this paragraph (2), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock of the Company. The Company shall not issue any rights, options or warrants in respect of shares of its Common Stock held in the treasury of the Company. When used in this Section 1704, the term “Short Term Rights” shall mean rights, warrants or options entitling the holders thereof (for a period commencing no earlier than the Rights Record Date and expiring not more than 45 days after the Rights Record Date) to subscribe for or purchase shares of Common Stock of the Company at a price per share less than the current market price per share (determined as provided in paragraph (7) of this Section 1704) of the Common Stock of the Company on the Rights Record Date.

(3) In case outstanding shares of Common Stock of the Company shall be subdivided into a greater number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such subdivision becomes effective shall be proportionately reduced, and, conversely, in case outstanding shares of Common Stock of the Company shall be combined into a smaller number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such combination becomes effective shall be proportionately increased, such reduction or increase, as the case may be, to become effective immediately after the opening of business on the day following the day upon which such subdivision or combination becomes effective.

(4) Subject to the last sentence of this paragraph (4) of this Section, if the Company, by dividend or otherwise, (a) distributes to all holders of its Common Stock evidences of its indebtedness, shares of any class of Capital Stock of the Company or other assets (other than cash dividends out of current or retained earnings), or (b) distributes to substantially all holders of Common Stock rights or warrants to subscribe for securities (other than Short Term Rights to which paragraph (2) of this Section 1704 applies), the Conversion Price shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the current market price per share (determined as provided in paragraph (7) of this Section 1704) of the Common Stock of the Company on the Reference Date (as defined below) less the fair market value (as determined in good faith by the Board of Directors, whose determination shall



be conclusive and described in a Board Resolution filed with the Trustee), on the Reference Date, of the portion of the evidences of indebtedness and other assets so distributed or of such subscription rights or warrants applicable to one share of Common Stock (collectively, the "Market Value of the Distribution") and the denominator shall be such current market price per share of the Common Stock of the Company. Such reduction shall become effective immediately prior to the opening of business on the day (the "Reference Date") following the later of (a) the date fixed for the payment of such distribution and (b) the date 20 days after notice relating to such distribution is required to be given pursuant to Section 1706(a). If the Board of Directors determines the fair market value of any distribution for purposes of this paragraph (4) by reference to the actual or when issued trading market for any securities comprising such distribution, it must in doing so consider the prices in such market over the same period used in computing the current market price per share pursuant to paragraph (7) of this Section 1704. In the event that, with respect to any distribution to which this paragraph

(5) of Section 1704 would otherwise apply, the Market Value of the Distribution is greater than the current market price per share of the Common Stock (such distribution being referred to herein as an "Unadjusted Distribution"), then the adjustment provided by this paragraph (4) shall not be made and in lieu thereof the provisions of Section 1711 shall apply with respect to such Unadjusted Distribution.

(6) The Company may, but shall not be required to, make such reductions in the Conversion Price, in addition to those required by paragraphs (1), (2), (3), and (4) of this Section 1704, as it considers to be advisable in order that any event treated for federal income tax purposes as a dividend of stock or stock rights shall not be taxable to the recipients. In addition, the Company, from time to time, may decrease the Conversion Price by any amount and for any reason, temporarily or otherwise, including situations where the Board of Directors determines such decrease to be fair and appropriate with respect to transactions in which holders of Common Stock have the right to participate.

(7) Rights or warrants issued or distributed by the Company to all holders of its Common Stock entitling the holders thereof to subscribe for or purchase shares of Common Stock or Preferred Stock, which rights or warrants (i) are deemed to be transferred with such shares of Common Stock, (ii) are not exercisable and (iii) are also issued or distributed in respect of future issuances of Common Stock, in each case in clauses (i) through (iii) until the occurrence of a specified event or events ("Trigger Events"), shall for purposes of this Section 1704 not be deemed issued or distributed until the occurrence of the earliest Trigger Event. Each share of Common Stock issued upon conversion of Securities pursuant to this Article Seventeen shall be entitled to receive the appropriate number of Common Stock purchase rights (the "Rights"), if any, and the certificates representing the Common Stock issued upon conversion shall bear such legends, if any. Notwithstanding anything to the contrary in this Article Seventeen, there shall not be any adjustment to the Conversion Price as a result of (i) the distribution of separate certificates representing the Rights; (ii) the occurrence of certain events entitling holders of Rights to receive, upon exercise thereof, Common Stock or other securities of the Company or other securities of another corporation; or (iii) the exercise of such Rights. No adjustment in the Conversion Price need be made for rights to purchase or the sale of Common Stock pursuant to a Company plan providing for reinvestment of dividends or interest.

(8) For the purpose of any computation under paragraph (2), (4) or (5) of this Section 1704, the “current market price” per share of Common Stock of the Company on any date shall be deemed to be the average of the daily Closing Prices for the 15 consecutive Trading Days selected by the Company commencing not more than 30 Trading Days before, and ending not later than, the date in question.

(9) No adjustment in the Conversion Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Price; provided, however, that any adjustments which by reason of this paragraph (8) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Article Seventeen shall be made to the nearest cent or to the nearest one-hundredth of a share of Common Stock, as the case may be.

(10) Anything herein to the contrary notwithstanding, in the event the Company shall declare any dividend or distribution requiring an adjustment in the Conversion Price hereunder and shall, thereafter and before the payment of such dividend or distribution to stockholders, legally abandon its plan to pay such dividend or distribution, the Conversion Price then in effect hereunder, if changed to reflect such dividend or distribution, shall upon the legal abandonment of such plan be changed to the Conversion Price which would have been in effect at the time of such abandonment (after giving effect to all other adjustments not so legally abandoned pursuant to the provisions of this Article Seventeen) had such dividend or distribution never been declared.

(11) Notwithstanding any other provision of this Section 1704, no adjustment to the Conversion Price shall reduce the Conversion Price below the then par value per share of the Common Stock of the Company, and any such purported adjustment shall instead reduce the Conversion Price to such par value. Notwithstanding the foregoing sentence, the Company hereby covenants that it will from time to time take all such action as may be required to assure that the par value per share of the Common Stock is at all times equal to or less than the Conversion Price.

(12) In the event that this Article Seventeen requires adjustments to the Conversion Price under more than one of paragraphs (1), (2), (3) or (4) of this Section 1704, and the record or effective dates for the transaction giving rise to such adjustments shall occur on the same date, then such adjustments shall be made by applying (to the extent they are applicable), first, the provisions of paragraph (3) of this Section 1704, second, the provisions of paragraph (1) of this Section 1704, third, the provisions of paragraph (4) of this Section 1704 and, fourth, the provisions of paragraph (2) of this Section 1704. Anything herein to the contrary notwithstanding, no single event shall require or result in duplicative adjustments in the Conversion Price pursuant to this Section 1704. After an adjustment to the Conversion Price under this Article Seventeen, any subsequent event requiring an adjustment under this Article Seventeen shall cause an adjustment to the Conversion Price as so adjusted. If, after an adjustment, a Holder of a Security upon conversion of such Security receives shares of two or more classes of Capital Stock of the Company, the Conversion Price shall thereafter be subject to adjustment upon the occurrence of an action taken with respect to any such class of Capital Stock as is contemplated by this Article Seventeen with respect to the Common Stock in this Article Seventeen.

SECTION 1705 Notice of Adjustments of Conversion Price. Whenever the Conversion Price is adjusted as herein provided:

- (1) the Company shall compute the adjusted Conversion Price in accordance with Section 1704 or Section 1711 and shall prepare an Officer's Certificate setting forth the adjusted Conversion Price and showing in reasonable detail the facts upon which such adjustment is based, and such certificate shall forthwith be filed (with a copy to the Trustee) at each office or agency maintained for the purpose of conversion of any Securities pursuant to Section 1002; and
- (2) a notice stating that the Conversion Price has been adjusted and setting forth the adjusted Conversion Price shall forthwith be required, and as soon as practicable after it is required, such notice shall be mailed by the Company to all Holders at their last addresses as they shall appear in the Security Register.

SECTION 1706 Notice of Certain Corporate Action. In case:

- (1) the Company shall take any action that would require a Conversion Price adjustment pursuant to Section 1704 or Section 1711; or
- (2) there shall occur any reclassification of the Common Stock of the Company (other than a subdivision or combination of its outstanding shares of Common Stock), or any consolidation or merger to which the Company is a party, or the sale, transfer or lease of all or substantially all of the assets of the Company and for which approval of any stockholders of the Company is required; or
- (3) there shall occur the voluntary or involuntary dissolution, liquidation or winding up of the Company, then the Company shall cause to be filed at each office or agency maintained for the purpose of conversion of Securities pursuant to Section 1002, and shall cause to be mailed to all Holders at their last addresses as they shall appear in the Security Register, at least 10 days prior to the applicable record, effective or expiration date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of any dividend, distribution or granting of rights, warrants or options, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights, options or warrants are to be determined, or (y) the date on which such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up is expected to become effective, and, if applicable, the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up.

SECTION 1707 Company to Reserve Common Stock. The Company shall at all times reserve and keep available, free from preemptive rights, out of its authorized but unissued Common Stock, for the purpose of effecting the conversion of Securities, a number of shares of Common Stock for the conversion of all outstanding Securities of any series which is convertible into Common Stock.

90

---

SECTION 1708 Taxes on Conversion. The Company will pay any and all taxes that may be payable in respect of the issue or delivery of shares of Common Stock on conversion of Securities pursuant hereto. The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in a name other than that of the Holder of the Security or Securities to be converted, and no such issue or delivery shall be made unless and until the Person requesting such issue has paid to the Company the amount of any such tax, or has established to the satisfaction of the Company that such tax has been paid.

SECTION 1709 Covenants as to Common Stock. The Company covenants that all shares of Common Stock which may be issued upon conversion of Securities will upon issue be duly and validly issued, fully paid and nonassessable, free of preemptive or any similar rights, and, except as provided in Section 1708, the Company will pay all taxes, liens and charges with respect to the issue thereof.

The Company will endeavor promptly to comply with all Federal and state securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Securities, if any, and will list or cause to have quoted such shares of Common Stock on each national securities exchange or in the over-the-counter market or such other market on which the Common Stock is then listed or quoted.

SECTION 1710 Cancellation of Converted Securities. All Securities delivered for conversion shall be delivered to the Trustee to be cancelled by or at the direction of the Trustee, which shall dispose of the same as provided in Section 309.

SECTION 1711 Provisions in Case of Consolidation, Merger or Sale of Assets; Special Distributions. If any of the following shall occur, namely: (i) any reclassification or change of outstanding shares of Common Stock issuable upon conversion of Securities (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), (ii) any consolidation or merger to which the Company is a party other than a merger in which the Company is the continuing corporation and which does not result in any reclassification of, or change (other than a change in name, or par value, or from par value to no par value, or from no par value to par value or as a result of a subdivision or combination) in, outstanding shares of Common Stock or (iii) any sale or conveyance of all or substantially all of the property or business of the Company as an entirety, then the Person formed by such consolidation or resulting from such merger or which acquires such properties or assets, as the case may be, shall as a condition precedent to such transaction execute and deliver to the Trustee a supplemental indenture providing that the Holder of each Security then outstanding shall have the right thereafter, during the period such Security shall be convertible as specified in Section 1701, to convert such Security only into the kind and amount of securities, cash and other property receivable, if any, upon such consolidation, merger, sale, transfer or lease by a holder of the number of shares of Common Stock of the Company into which such Security might have been converted immediately prior to such consolidation, merger, sale, transfer or lease; provided that the kind and amount of securities, cash and other property so receivable shall be determined on the basis of the following assumptions. The holder of Common Stock referred to in the foregoing sentence:

91

---

(1) is not (a) a Person with which the Company consolidated, (b) a Person into which the Company merged or which merged into the Company, or (c) a Person to which such sale, transfer or lease was made (any Person described in the foregoing clauses (a), (b), or (c), hereinafter referred to as a "Constituent Person"), or (d) an Affiliate of a Constituent Person; and

(2) failed to exercise his rights of election, if any, as to the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale, transfer or lease (provided that if the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale transfer or lease is not the same for each share of Common Stock of the Company in respect of which such rights of election shall not have been exercised, then for the purpose of this Section 1711 the kind and amount of securities, cash and other property receivable upon such consolidation, merger, sale, transfer or lease shall be deemed to be the kind and amount so receivable per share by a plurality of such shares of Common Stock).

Such supplemental indenture shall provide for adjustments which, for events subsequent to the effective date of such supplemental indenture, shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article Seventeen. If, in the case of any such consolidation, merger, sale transfer or lease the stock or other securities and property (including cash) receivable thereupon by a holder of Common Stock includes shares of stock or other securities and property of a corporation other than the successor or purchasing corporation, as the case may be, in such consolidation, merger, sale, transfer or lease then such supplemental indenture shall also be executed by such other corporation and shall contain such additional provisions to protect the interests of the Holders of the Securities as the Board of Directors of the Company shall reasonably consider necessary by reason of the foregoing. The above provisions of this Section 1711 shall similarly apply to successive consolidations, mergers, sales, transfers or leases.

In the event the Company shall execute a supplemental indenture pursuant to this Section 1711, the Company shall promptly file with the Trustee an Officers' Certificate briefly stating the reasons therefor, the kind or amount of shares of stock or securities or property (including cash) receivable by Holders of the Securities upon the conversion of their Securities after any such reclassification, change, consolidation, merger, sale, transfer or lease and any adjustment to be made with respect thereto.

If the Company makes a distribution to all holders of its Common Stock that constitutes an Unadjusted Distribution pursuant to the last sentence of paragraph (4) of Section 1704, then, from and after the record date for determining the holders of Common Stock entitled to receive such distribution (the "Distribution Record Date"), a Holder of a Security who converts such Security in accordance with the provisions of this Indenture shall, upon conversion, be entitled to receive, in addition to the shares of Common Stock into which the Security is convertible, the kind and amount of evidences of indebtedness, shares of Capital Stock, or other assets or subscription rights or warrants, as the case may be, comprising the distribution that such Holder would have received if such Holder had converted the Security immediately prior to the Distribution Record Date.

SECTION 1712 Trustee Adjustment Disclaimer; Company Determination Final. The Trustee has no duty to determine when an adjustment under this Article Seventeen should be

made, how it should be made or what it should be. The Trustee has no duty to determine whether a supplemental indenture under Section 1711 need be entered into or whether any provisions of any supplemental indenture are correct. The Trustee shall not be accountable for and makes no representation as to the validity or value of any securities or assets issued upon conversion of Securities. The Trustee shall not be responsible for the Company's failure to comply with this Article Seventeen. Any determination that the Company or the Board of Directors must make pursuant to this Article Seventeen is conclusive, absent manifest error.

SECTION 1713 When No Adjustment Required. Except as expressly set forth in Section 1704, no adjustment in the Conversion Price shall be made because the Company issues, in exchange for cash, property or services, shares of its Common Stock, or any securities convertible into or exchangeable for shares of its Common Stock, or securities (including warrants, rights and options) carrying the right to subscribe for or purchase shares of its Common Stock or such convertible or exchangeable securities.

(1) Notwithstanding anything herein to the contrary, no adjustment in the Conversion Price shall be made pursuant to Section 1704 in respect of any dividend or distribution if the Holders may participate therein (on a basis to be determined in good faith by the Board of Directors) and receive the same consideration they would have received if they had converted the Securities immediately prior to the record date with respect to such dividend or distribution.

SECTION 1714 Equivalent Adjustments. In the event that, as a result of an adjustment made pursuant to Section 1704 above, the holder of any Security thereafter surrendered for conversion shall become entitled to receive any shares of Capital Stock of the Company other than shares of its Common Stock, thereafter the Conversion Price of such other shares so receivable upon conversion of any Securities shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to Common Stock contained in this Article Seventeen.

**SIGNATURES**

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed all as of the day and year first above written.

RHYTHM PHARMACEUTICALS, INC.

By: \_\_\_\_\_  
Name:  
Title:

[NAME OF TRUSTEE],  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

EXHIBIT A

FORM OF REDEEMABLE OR NON-REDEEMABLE SUBORDINATED SECURITY

[Face of Security]

[If the Holder of this Security (as indicated below) is The Depository Trust Company (“DTC”) or a nominee of DTC, this Security is a Global Security and the following two legends apply:

**Unless this Security is presented by an authorized representative of The Depository Trust Company a New York corporation (“DTC”) to the Company or its agent for registration of transfer, conversion, exchange or payment, and such Security issued is registered in the name of Cede & Co., or in such other name as requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL, inasmuch as the registered owner hereof, Cede & Co., has an interest herein.**

**Unless and until this Security is exchanged in whole or in part for Securities in certificated form, this Security may not be transferred except as a whole by DTC to a nominee thereof or by a nominee thereof to DTC or another nominee of DTC or by DTC or any such nominee to a successor of DTC or a nominee of such successor.]**

[If this Security is an Original Issue Discount Security, insert — FOR PURPOSES OF SECTION 1273 and 1275 OF THE UNITED STATES INTERNAL REVENUE CODE, THE AMOUNT OF ORIGINAL ISSUE DISCOUNT ON THIS SECURITY IS \_\_\_\_\_% OF ITS PRINCIPAL AMOUNT, THE ISSUE DATE IS \_\_\_\_\_, 20\_\_\_\_, AND THE YIELD TO MATURITY IS \_\_\_\_\_%. THE METHOD USED TO DETERMINE THE AMOUNT OF ORIGINAL ISSUE DISCOUNT APPLICABLE TO THE SHORT ACCRUAL PERIOD OF \_\_\_\_\_, 20\_\_\_\_ TO \_\_\_\_\_, 20\_\_\_\_, IS \_\_\_\_\_% OF THE PRINCIPAL AMOUNT OF THIS SECURITY.]

RHYTHM PHARMACEUTICALS, INC.

[Designation of Series]

No. \_\_\_\_\_ \$ \_\_\_\_\_

CUSIP No. \_\_\_\_\_

RHYTHM PHARMACEUTICALS, INC., a Massachusetts corporation (herein referred to as the “Company,” which term includes any successor corporation under the Indenture referred to on the reverse hereof), for value received, hereby promises to pay to \_\_\_\_\_ or registered assigns the principal sum of \_\_\_\_\_ Dollars on \_\_\_\_\_ (the “Stated Maturity Date”) [or insert date fixed for earlier redemption (the “Redemption Date,” and together with the Stated Maturity Date with respect to principal repayable on such date, the “Maturity Date.”)]

[If the Security is to bear interest prior to Maturity, insert — and to pay interest thereon from \_\_\_\_\_ or from the most recent Interest Payment Date to which interest has been

paid or duly provided for, semi-annually on and in each year (each, an "Interest Payment Date"), commencing \_\_\_\_\_, at the rate of % per annum, until the principal hereof is paid or duly provided for. The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date will, as provided in such Indenture, be paid to the Holder in whose name this Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest, which shall be the or \_\_\_\_\_ (whether or not a Business Day), as the case may be, next preceding such Interest Payment Date [at the office or agency of the Company maintained for such purpose; provided, however, that such interest may be paid, at the Company's option, by mailing a check to such Holder at its registered address or by transfer of funds to an account maintained by such Holder within the United States]. Any such interest not so punctually paid or duly provided for shall forthwith cease to be payable to the Holder on such Regular Record Date, and may be paid to the Holder in whose name this Security (or one or more Predecessor Securities) is registered at the close of business on a Special Record Date for the payment of such Defaulted Interest to be fixed by the Trustee, notice whereof shall be given to Holders of Securities of this series not less than 10 days prior to such Special Record Date, or may be paid at any time in any other lawful manner not inconsistent with the requirements of any over-the-counter market or securities exchange on which the Securities of this series may be quoted or listed, and upon such notice as may be required by such market or exchange, all as more fully provided in the Indenture. Interest will be computed on the basis of a 360-day year of twelve 30-day months.]

[If the Security is not to bear interest prior to Maturity, insert — The principal of this Security shall not bear interest except in the case of a default in payment of principal upon acceleration, upon redemption or at the [Stated] Maturity Date and in such case the overdue principal of this Security shall bear interest at the rate of % per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such default in payment to the date payment of such principal has been made or duly provided for. Interest on any overdue principal shall be payable on demand. Any such interest on any overdue principal that is not so paid on demand shall bear interest at the rate of % per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such demand for payment to the date payment of such interest has been made or duly provided for, and such interest shall also be payable on demand.]

The principal of this Security payable on the Stated Maturity Date [or the principal of, premium or Make-Whole Amount, if any, and, if the Redemption Date is not an Interest Payment Date, interest on this Security payable on the Redemption Date] will be paid against presentation of this Security at the office or agency of the Company maintained for that purpose in \_\_\_\_\_, in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

Interest payable on this Security on any Interest Payment Date and on the [Stated] Maturity Date [or Redemption Date, as the case may be,] will include interest accrued from and including the next preceding Interest Payment Date in respect of which interest has been paid or duly provided for (or from and including \_\_\_\_\_, if no interest has been paid on this Security) to but excluding such Interest



Payment Date or the [Stated] Maturity Date [or Redemption Date, as the case may be.] If any Interest Payment Date or the [Stated] Maturity Date or [Redemption Date] falls on a day that is not a Business Day, as defined below, principal, premium or Make-Whole Amount, if any, and/or interest payable with respect to such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be,] will be paid on the next succeeding Business Day with the same force and effect as if it were paid on the date such payment was due, and no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be.] "Business Day" means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in The City of New York are required or authorized by law, regulation or executive order to close.

[If this Security is a Global Security, insert — All payments of principal, premium or Make-Whole Amount, if any, and interest in respect of this Security will be made by the Company in immediately available funds.]

Reference is hereby made to the further provisions of this Security set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.

Unless the Certificate of Authentication hereon has been executed by the Trustee by manual signature of one of its authorized signatories, this Security shall not be entitled to any benefit under the Indenture, or be valid or obligatory for any purpose.

IN WITNESS WHEREOF, the Company has caused this instrument to be duly executed under its facsimile corporate seal.

Dated: \_\_\_\_\_

RHYTHM PHARMACEUTICALS, INC.

By: \_\_\_\_\_

Name:

Title:

Attest:

97

[Reverse of Security]

RHYTHM PHARMACEUTICALS, INC.

This Security is one of a duly authorized issue of securities of the Company (herein called the "Securities"), issued and to be issued in one or more series under an Indenture, dated as of \_\_\_\_\_, 20\_\_ (herein called the "Indenture") between the Company and [Name of Trustee], as Trustee (herein called the "Trustee," which term includes any successor trustee under the Indenture with respect to the series of which this Security is a part), to which Indenture and all indentures supplemental thereto reference is hereby made for a statement of the respective rights, limitations of rights, duties and immunities thereunder of the Company, the Trustee and the Holders of the Securities, and of the terms upon which the Securities are, and are to be, authenticated and delivered. This Security is one of the duly authorized series of Securities designated on the face hereof (collectively, the "Securities"), [if applicable, insert — and the aggregate principal amount of the Securities to be issued under such series is limited to \$\_\_\_\_\_ (except for Securities authenticated and delivered upon transfer of, or in exchange for, or in lieu of other Securities).] All terms used in this Security which are defined in the Indenture shall have the meanings assigned to them in the Indenture.

If an Event of Default, as defined in the Indenture, shall occur and be continuing, the principal of the Securities of this series may be declared due and payable in the manner and with the effect provided in the Indenture.

[If applicable, insert — The Securities may not be redeemed prior to the Stated Maturity Date.]

[If applicable, insert — The Securities are subject to redemption [ (1) (If applicable, insert — on \_\_\_\_\_ in any year commencing with the year \_\_\_\_ and ending with the year \_\_\_\_\_ through operation of the sinking fund for this series at a Redemption Price equal to 100% of the principal amount, and (2) ] [If applicable, insert — at any time [on or after ], as a whole or in part, at the election of the Company, at the following Redemption Prices (expressed as percentages of the principal amount):

If redeemed on or before \_\_\_\_\_, \_\_\_\_\_ % and if redeemed during the 12-month period beginning \_\_\_\_\_ of the years indicated at the

Redemption Prices indicated below.

Year \_\_\_\_\_ Redemption Price \_\_\_\_\_ Year \_\_\_\_\_ Redemption Price \_\_\_\_\_ and thereafter at a Redemption Price equal to \_\_\_\_\_ % of the principal amount, together in the case of any such redemption [If applicable, insert — (whether through operation of the sinking fund or otherwise)] with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — The Securities are subject to redemption (1) on \_\_\_\_\_ in any year commencing with the year \_\_\_\_\_ and ending with the year \_\_\_\_\_ through operation of the sinking fund for this series at the Redemption Prices for redemption through operation of the sinking

98

fund (expressed as percentages of the principal amount) set forth in the table below, and (2) at any time [on or after], as a whole or in part, at the election of the Company, at the Redemption Prices for redemption otherwise than through operation of the sinking fund (expressed as percentages of the principal amount) set forth in the table below: If redeemed during the 12-month period beginning \_\_\_\_\_ of the years indicated, Redemption Price for Redemption Price for \_\_\_\_\_ Redemption Otherwise Than Redemption Through \_\_\_\_\_ Through Operation of the Year \_\_\_\_\_ Operation of the Sinking Fund Sinking Fund and thereafter at a Redemption Price equal to \_\_\_\_\_ % of the principal amount, together in the case of any such redemption (whether through operation of the sinking fund or otherwise) with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — Notwithstanding the foregoing, the Company may not, prior to \_\_\_\_\_, redeem any Securities as contemplated by [Clause (2) of] the preceding paragraph as a part of, or in anticipation of, any refunding operation by the application, directly or indirectly, of moneys borrowed having an interest cost to the Company (calculated in accordance with generally accepted financial practice) of less than \_\_\_\_\_ % per annum.]

[If applicable, insert — The sinking fund for the Securities provides for the redemption on \_\_\_\_\_ in each year, beginning with the year and ending with the year \_\_\_\_\_, of [not less than] \$ \_\_\_\_\_] [(“mandatory sinking fund”) and not more than \$ \_\_\_\_\_] aggregate principal amount of the Securities. [The Securities acquired or redeemed by the Company otherwise than through [mandatory] sinking fund payments may be credited against subsequent [mandatory] sinking fund payments otherwise required to be made in the [describe order] order in which they become due.]]

Notice of redemption will be given by mail to Holders of Securities, not less than 30 nor more than 60 days prior to the Redemption Date, all as provided in the Indenture.

In the event of redemption of this Security in part only, a new Security or Securities for the unredeemed portion hereof shall be issued in the name of the Holder hereof upon the cancellation hereof.

[If applicable, insert conversion provisions set forth in any Board Resolution or indenture supplemental to the Indenture.]

The Indenture permits, with certain exceptions as therein provided, the amendment thereof and the modification of the rights and obligations of the Company and the rights of the Holders of the Securities under the Indenture at any time by the Company and the Trustee with the consent of the Holders of not less than a majority of the aggregate principal amount of all Securities issued under the Indenture at the time Outstanding and affected thereby. The Indenture also contains provisions permitting the Holders of not less than a majority of the aggregate principal amount of the Outstanding Securities, on behalf of the Holders of all such Securities, to waive compliance by the Company with certain provisions of the Indenture. Furthermore, provisions in the Indenture permit the Holders of not less than a majority of the aggregate principal amount, in

certain instances, of the Outstanding Securities of any series to waive, on behalf of all of the Holders of Securities of such series, certain past defaults under the Indenture and their consequences. Any such consent or waiver by the Holder of this Security shall be conclusive and binding upon such Holder and upon all future Holders of this Security and other Securities issued upon the registration of transfer hereof or conversion or in exchange herefor or in lieu hereof, whether or not notation of such consent or waiver is made upon this Security.

No reference herein to the Indenture and no provision of this Security or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of (and premium or Make-Whole Amount, if any) and interest on this Security at the times, places and rate, and in the coin or currency, herein prescribed.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, the transfer of this Security is registrable in the Security Register of the Company upon surrender of this Security for registration of transfer at the office or agency of the Company in any place where the principal of (and premium or Make-Whole Amount, if any) and interest on this Security are payable, duly endorsed by, or accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed by, the Holder hereof or by his attorney duly authorized in writing, and thereupon one or more new Securities, of authorized denominations and for the same aggregate principal amount, will be issued to the designated transferee or transferees.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, this Security is exchangeable for a like aggregate principal amount of Securities of different authorized denominations but otherwise having the same terms and conditions, as requested by the Holder hereof surrendering the same.

This Security is subordinated to the prior payment in full in cash of Senior Indebtedness to the extent set forth in Article Sixteen of the Indenture.

The Securities of this series are issuable only in registered form [without coupons] in denominations of \$     and any integral multiple thereof.

No service charge shall be made for any such registration of transfer or conversion or exchange, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith,

Prior to due presentment of this Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name this Security is registered as the owner hereof for all purposes, whether or not this Security be overdue, and neither the Company, the Trustee nor any such agent shall be affected by notice to the contrary.

No recourse shall be had for the payment of the principal of or premium or Make-Whole Amount, if any, or the interest on this Security, or for any claim based hereon, or otherwise in respect hereof, or based on or in respect of the Indenture or any indenture supplemental thereto, against any past, present or future stockholder, employee, officer or director, as such, of the Company or of any successor, either directly or through the Company or any successor, whether by virtue of any constitution, statute or rule of law or by the enforcement of any assessment or

penalty or otherwise, all such liability being, by the acceptance hereof and as part of the consideration for the issue hereof, expressly waived and released.

The Indenture and the Securities shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed entirely in such State.

EXHIBIT B

FORMS OF CERTIFICATION

EXHIBIT B-1

FORM OF CERTIFICATE TO BE GIVEN BY PERSON ENTITLED TO RECEIVE BEARER

SECURITY OR TO OBTAIN INTEREST PAYABLE PRIOR TO THE EXCHANGE DATE

CERTIFICATE

[Insert title or sufficient description of Securities to be delivered]

This is to certify that, as of the date hereof, and except as set forth below, the above-captioned Securities held by you for our account (i) are owned by person(s) that are not citizens or residents of the United States, domestic partnerships, domestic corporations or any estate or trust the income of which is subject to United States Federal income taxation regardless of its source ("United States person(s)"), (ii) are owned by United States person(s) that are (a) foreign branches of United States financial institutions (financial institutions, as defined in United States Treasury Regulations Section 2.165-12(c)(1) (v) are herein referred to as "financial institutions") purchasing for their own account or for resale, or (b) United States person(s) who acquired the Securities through foreign branches of United States financial institutions and who hold the Securities through such United States financial institutions on the date hereof (and in either case (a) or (b), each such United States financial institution hereby agrees, on its own behalf or through its agent, that you may advise Rhythm Pharmaceuticals, Inc. or its agent that such financial institution will comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the United States Internal Revenue Code of 1986, as amended, and the regulations thereunder), or (iii) are owned by United States or foreign financial institution(s) for purposes of resale during the restricted period (as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), and, in addition, if the owner is a United States or foreign financial institution described in clause (iii) above (whether or not also described in clause (i) or (ii)), this is to further certify that such financial institution has not acquired the Securities for purposes of resale directly or indirectly to a United States person or to a person within the United States or its possessions.

As used herein, "United States" means the United States of America (including the States and the District of Columbia); and its "possessions" include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands.

We undertake to advise you promptly by tested telex or by telecopy on or prior to the date on which you intend to submit your certification relating to the above-captioned Securities held by you for our account in accordance with your operating procedures if any applicable statement herein is not correct on such date, and in the absence of any such notification it may be assumed that this certification applies as of such date.

This certificate excepts and does not relate to [U.S.\$] of such interest in the above-captioned Securities in respect of which we are not able to certify and as to which we understand an

exchange for an interest in a permanent Global Security or an exchange for and delivery of definitive Securities (or, if relevant, collection of any interest) cannot be made until we do so certify.

We understand that this certificate may be required in connection with certain tax legislation in the United States. If administrative or legal proceedings are commenced or threatened in connection with which this certificate is or would be relevant, we irrevocably authorize you to produce this certificate or a copy thereof to any interested party in such proceedings.

Dated: \_\_\_\_\_

[To be dated no earlier than the 15th day prior to (i) the Exchange Date or (ii) the relevant Interest Payment Date occurring prior to the Exchange Date, as applicable]

[Name of Person Making Certification]

\_\_\_\_\_  
(Authorized Signature)

Name:

Title:

**RHYTHM PHARMACEUTICALS, INC.**

**TO**

**[NAME OF TRUSTEE]**

**Trustee**

**Indenture**

**Dated as of \_\_\_\_\_, 20\_\_**

**Senior Debt Securities**

---

## TABLE OF CONTENTS

|   | <u>Page</u> |
|---|-------------|
| ARTICLE 1. DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION                                      | 1           |
| SECTION 101. Definitions  | 1           |
| SECTION 102. Compliance Certificates and Opinions   | 10          |
| SECTION 103. Form of Documents Delivered to Trustee   | 11          |
| SECTION 104. Acts of Holders  | 11          |
| SECTION 105. Notices, etc., to Trustee and Company  | 13          |
| SECTION 106. Notice to Holders; Waiver  | 14          |
| SECTION 107. Counterparts; Effect of Headings and Table of Contents                                     | 15          |
| SECTION 108. Successors and Assigns   | 15          |
| SECTION 109. Severability Clause  | 15          |
| SECTION 110. Benefits of Indenture  | 15          |
| SECTION 111. Governing Law  | 15          |
| SECTION 112. Legal Holidays   | 15          |
| SECTION 113. Limited Liability; Immunity of Stockholders, Directors, Officers and Agents of the Company | 15          |
| SECTION 114. Conflict with Trust Indenture Act  | 16          |
| ARTICLE 2. SECURITIES FORMS   | 16          |
| SECTION 201. Forms of Securities  | 16          |
| SECTION 202. Form of Trustee's Certificate of Authentication  | 16          |
| SECTION 203. Securities Issuable in Global Form   | 17          |
| ARTICLE 3. THE SECURITIES   | 18          |
| SECTION 301. Amount Unlimited; Issuable in Series   | 18          |
| SECTION 302. Denominations  | 21          |
| SECTION 303. Execution, Authentication, Delivery and Dating   | 22          |
| SECTION 304. Temporary Securities   | 24          |
| SECTION 305. Registration, Registration of Transfer, Conversion and Exchange                            | 26          |
| SECTION 306. Mutilated, Destroyed, Lost and Stolen Securities   | 30          |
| SECTION 307. Payment of Interest; Interest Rights Preserved   | 31          |
| SECTION 308. Persons Deemed Owners  | 33          |



**TABLE OF CONTENTS**  
(continued)

|  | <u>Page</u> |
|--|-------------|
| SECTION 309. Cancellation  | 33          |
| SECTION 310. Computation of Interest   | 34          |
| SECTION 311. CUSIP Numbers   | 34          |
| ARTICLE 4. SATISFACTION AND DISCHARGE  | 34          |
| SECTION 401. Satisfaction and Discharge of Indenture   | 34          |
| SECTION 402. Application of Trust Funds  | 35          |
| ARTICLE 5. REMEDIES  | 36          |
| SECTION 501. Events of Default   | 36          |
| SECTION 502. Acceleration of Maturity; Rescission and Annulment  | 37          |
| SECTION 503. Collection of Indebtedness and Suits for Enforcement by Trustee   | 38          |
| SECTION 504. Trustee May File Proofs of Claim  | 39          |
| SECTION 505. Trustee May Enforce Claims Without Possession of Securities or Coupons                                  | 40          |
| SECTION 506. Application of Money Collected  | 40          |
| SECTION 507. Limitation on Suits   | 41          |
| SECTION 508. Unconditional Right of Holders to Receive Principal, Premium or Make-Whole Amount, if any, and Interest | 41          |
| SECTION 509. Restoration of Rights and Remedies  | 41          |
| SECTION 510. Rights and Remedies Cumulative  | 42          |
| SECTION 511. Delay or Omission Not Waiver  | 42          |
| SECTION 512. Control by Holders of Securities  | 42          |
| SECTION 513. Waiver of Past Defaults   | 42          |
| SECTION 514. Waiver of Usury, Stay or Extension Laws   | 43          |
| SECTION 515. Undertaking for Costs   | 43          |
| ARTICLE 6. THE TRUSTEE   | 43          |
| SECTION 601. Notice of Defaults  | 43          |
| SECTION 602. Certain Rights of Trustee   | 44          |
| SECTION 603. Not Responsible for Recitals or Issuance of Securities  | 46          |
| SECTION 604. May Hold Securities   | 46          |
| SECTION 605. Money Held in Trust   | 46          |

**TABLE OF CONTENTS**  
(continued)

|                    |   | <b>Page</b> |
|--------------------|---|-------------|
| SECTION 606.       | Compensation and Reimbursement  | 46          |
| SECTION 607.       | Corporate Trustee Required; Eligibility; Conflicting Interests  | 47          |
| SECTION 608.       | Resignation and Removal; Appointment of Successor   | 47          |
| SECTION 609.       | Acceptance of Appointment by Successor  | 49          |
| SECTION 610.       | Merger, Conversion, Consolidation or Succession to Business   | 50          |
| SECTION 611.       | Appointment of Authenticating Agent   | 50          |
| SECTION 612.       | Certain Duties and Responsibilities of the Trustee  | 52          |
| <b>ARTICLE 7.</b>  | <b>HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY</b>  | <b>53</b>   |
| SECTION 701.       | Disclosure of Names and Addresses of Holders  | 53          |
| SECTION 702.       | Reports by Trustee  | 53          |
| SECTION 703.       | Reports by Company  | 53          |
| SECTION 704.       | Company to Furnish Trustee Names and Addresses of Holders   | 54          |
| <b>ARTICLE 8.</b>  | <b>CONSOLIDATION, MERGER, SALE, LEASE OR CONVEYANCE</b>   | <b>54</b>   |
| SECTION 801.       | Consolidations and Mergers of Company and Sales, Leases and Conveyances Permitted Subject to Certain Conditions | 54          |
| SECTION 802.       | Rights and Duties of Successor Corporation  | 55          |
| SECTION 803.       | Officers' Certificate and Opinion of Counsel  | 55          |
| <b>ARTICLE 9.</b>  | <b>SUPPLEMENTAL INDENTURES</b>  | <b>56</b>   |
| SECTION 901.       | Supplemental Indentures Without Consent of Holders  | 56          |
| SECTION 902.       | Supplemental Indentures with Consent of Holders   | 57          |
| SECTION 903.       | Execution of Supplemental Indentures  | 58          |
| SECTION 904.       | Effect of Supplemental Indentures   | 58          |
| SECTION 905.       | Conformity with Trust Indenture Act   | 58          |
| SECTION 906.       | Reference in Securities to Supplemental Indentures  | 58          |
| <b>ARTICLE 10.</b> | <b>COVENANTS</b>  | <b>59</b>   |
| SECTION 1001.      | Payment of Principal, Premium or Make-Whole Amount, if any; and Interest  | 59          |
| SECTION 1002.      | Maintenance of Office or Agency   | 59          |
| SECTION 1003.      | Money for Securities Payments to Be Held in Trust   | 61          |
| SECTION 1004.      | Existence   | 62          |
| SECTION 1005.      | Maintenance of Properties   | 62          |

**TABLE OF CONTENTS**  
(continued)

|  |  | Page |
|--|--|------|
| SECTION 1006.                                  | Insurance  | 62   |
| SECTION 1007.                                  | Payment of Taxes and Other Claims  | 62   |
| SECTION 1008.                                  | Statement as to Compliance   | 63   |
| SECTION 1009.                                  | Waiver of Certain Covenants  | 63   |
| ARTICLE 11. REDEMPTION OF SECURITIES           |  | 63   |
| SECTION 1101.                                  | Applicability of Article   | 63   |
| SECTION 1102.                                  | Election to Redeem; Notice to Trustee  | 63   |
| SECTION 1103.                                  | Selection by Trustee of Securities to Be Redeemed  | 63   |
| SECTION 1104.                                  | Notice of Redemption   | 64   |
| SECTION 1105.                                  | Deposit of Redemption Price  | 65   |
| SECTION 1106.                                  | Securities Payable on Redemption Date  | 65   |
| SECTION 1107.                                  | Securities Redeemed in Part  | 66   |
| ARTICLE 12. SINKING FUNDS                      |  | 67   |
| SECTION 1201.                                  | Applicability of Article   | 67   |
| SECTION 1202.                                  | Satisfaction of Sinking Fund Payments with Securities  | 67   |
| SECTION 1203.                                  | Redemption of Securities for Sinking Fund  | 67   |
| ARTICLE 13. REPAYMENT AT THE OPTION OF HOLDERS |  | 68   |
| SECTION 1301.                                  | Applicability of Article   | 68   |
| SECTION 1302.                                  | Repayment of Securities  | 68   |
| SECTION 1303.                                  | Exercise of Option   | 68   |
| SECTION 1304.                                  | When Securities Presented for Repayment Become Due and Payable                                 | 69   |
| SECTION 1305.                                  | Securities Repaid in Part  | 70   |
| ARTICLE 14. DEFEASANCE AND COVENANT DEFEASANCE |  | 70   |
| SECTION 1401.                                  | Applicability of Article; Company's Option to Effect Defeasance or Covenant Defeasance         | 70   |
| SECTION 1402.                                  | Defeasance and Discharge   | 70   |
| SECTION 1403.                                  | Covenant Defeasance  | 71   |
| SECTION 1404.                                  | Conditions to Defeasance or Covenant Defeasance  | 71   |
| SECTION 1405.                                  | Deposited Money and Government Obligations to Be Held in Trust; Other Miscellaneous Provisions | 73   |

**TABLE OF CONTENTS**  
(continued)

|               |  | <b>Page</b> |
|---------------|--|-------------|
| ARTICLE 15.   | MEETINGS OF HOLDERS OF SECURITIES  | 74          |
| SECTION 1501. | Purposes for Which Meetings May Be Called  | 74          |
| SECTION 1502. | Call, Notice and Place of Meetings   | 74          |
| SECTION 1503. | Persons Entitled to Vote at Meetings   | 74          |
| SECTION 1504. | Quorum; Action   | 74          |
| SECTION 1505. | Determination of Voting Rights; Conduct and Adjournment of Meetings                  | 76          |
| SECTION 1506. | Counting Votes and Recording Action of Meetings                                      | 76          |
| <br>          |  |             |
| ARTICLE 16.   | CONVERSION OF SECURITIES   | 77          |
| SECTION 1601. | Applicability of Article; Conversion Privilege and Conversion Price                  | 77          |
| SECTION 1602. | Exercise of Conversion Privilege   | 78          |
| SECTION 1603. | Fractions of Shares  | 79          |
| SECTION 1604. | Adjustment of Conversion Price   | 79          |
| SECTION 1605. | Notice of Adjustments of Conversion Price  | 82          |
| SECTION 1606. | Notice of Certain Corporate Action   | 83          |
| SECTION 1607. | Company to Reserve Common Stock  | 83          |
| SECTION 1608. | Taxes on Conversion  | 83          |
| SECTION 1609. | Covenants as to Common Stock   | 83          |
| SECTION 1610. | Cancellation of Converted Securities   | 84          |
| SECTION 1611. | Provisions in Case of Consolidation, Merger or Sale of Assets; Special Distributions | 84          |
| SECTION 1612. | Trustee Adjustment Disclaimer; Company Determination Final                           | 85          |
| SECTION 1613. | When No Adjustment Required  | 85          |
| SECTION 1614. | Equivalent Adjustments   | 86          |

RHYTHM PHARMACEUTICALS, INC.

Reconciliation and tie between the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act” or “TIA”) and the Indenture, dated as of \_\_\_\_\_, 20\_\_\_\_.

| <b>Trust Indenture Act Section</b> | <b>Indenture Section</b> |
|------------------------------------|--------------------------|
| § 310(a)(1)                        | 607                      |
| (a)(2)                             | 607                      |
| (b)                                | 607, 608                 |
| § 312(c)                           | 701                      |
| § 313(a)                           | 702                      |
| (c)                                | 702                      |
| § 314(a)                           | 703                      |
| (a)(4)                             | 1008                     |
| (c)(1)                             | 102                      |
| (c)(2)                             | 102                      |
| (e)                                | 102                      |
| § 315(b)                           | 601                      |
| § 316(a) (last sentence)           | 101                      |
| (a)(1)(A)                          | 512                      |
| (a)(1)(B)                          | 513                      |
| (b)                                | 508                      |
| § 317(a)(1)                        | 503, 505                 |
| (a)(2)                             | 504                      |
| § 318(a)                           | 111                      |
| (c)                                | 111                      |

NOTE: This reconciliation and tie shall not, for any purpose, be deemed to be a part of the Indenture.

Attention should also be directed to Section 318(c) of the Trust Indenture Act, which provides that the provisions of Sections 310 to and including 317 of the Trust Indenture Act are a part of and govern every qualified indenture, whether or not physically contained therein.

**INDENTURE**, dated as of \_\_\_\_\_, 20\_\_\_\_, between RHYTHM PHARMACEUTICALS, INC., a corporation organized under the laws of the Commonwealth of Massachusetts (hereinafter called the “Company”), having its principal office at 500 Boylston Street, Boston, MA 02116, and [NAME OF TRUSTEE], as Trustee hereunder (hereinafter called the “Trustee”), having a Corporate Trust Office at [\_\_\_\_\_].

**RECITALS OF THE COMPANY**

The Company deems it necessary to issue from time to time for its lawful purposes senior debt securities (hereinafter called the “Securities”) evidencing its unsecured and senior indebtedness, and has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of the Securities, to be issued in one or more Series as provided in this Indenture.

This Indenture is subject to the provisions of the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act” or “TIA”), that are deemed to be incorporated into this Indenture and shall, to the extent applicable, be governed by such provisions.

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:**

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of a Series thereof, as follows:

**ARTICLE 1.  
DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION**

**SECTION 101. Definitions.** For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (1) the terms defined in this Article have the meanings assigned to them in this Article, and include the plural as well as the singular;
- (2) all other terms used herein which are defined in the TIA, either directly or by reference therein, have the meanings assigned to them therein, and the terms “cash transactions” and “self-liquidating paper,” as used in TIA Section 311, shall have the meanings assigned to them in the rules of the Commission adopted under the TIA;
- (3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with GAAP;
- (4) any reference to an “Article” or a “Section” refers to an Article or Section, as the case may be, of this Indenture; and

(5) 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.

“Act,” when used with respect to any Holder, has the meaning specified in Section 104.

“Affiliate” of any specified Person means 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” means any Person authorized by the Trustee pursuant to Section 611 hereof to act on behalf of the Trustee to authenticate Securities of one or more Series.

“Authorized Newspaper” means a newspaper, printed in the English language or in an official language of the country of publication, customarily published on each Business Day, whether or not published on Saturdays, Sundays or holidays, and of general circulation in each place in connection with which the term is used or in the financial community of each such place. Whenever successive publications are required to be made in Authorized Newspapers, the successive publications may be made in the same or in different Authorized Newspapers in the same city meeting the foregoing requirements and in each case on any Business Day.

“Bankruptcy Law” has the meaning specified in Section 501.

“Bearer Security” means any Security established pursuant to Section 301 which is payable to the bearer.

“Board of Directors” when used with reference to the Company, means the board of directors of the Company, or any committee of that board duly authorized to act hereunder, or any director or directors and/or officer or officers of the Company, to whom the board or committee shall have duly delegated its authority.

“Board Resolution” means a copy of (1) a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors or a duly authorized committee of the Board of Directors and to be in full force and effect on the date of such certification, or (2) a certificate signed by the director or directors and/or officer or officers to whom the Board of Directors shall have duly delegated its authority, together with a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification authorizing such delegation, and, in each case, delivered to the Trustee.

“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, means, unless otherwise specified with respect to any Securities issued pursuant to Section 301, any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in that Place of

Payment or particular location are authorized or required by law, regulation or executive order to close.

“Capital Stock” means, with respect to any Person, any capital stock (including preferred stock), shares, interests, participations or other ownership interests (however designated) of such Person and any rights (other than debt securities convertible into or exchangeable for corporate stock), warrants or options to purchase any thereof.

“Clearstream” means Clearstream Banking Luxembourg, société anonyme, or its successor.

“Closing Price” means the closing price of a share of Common Stock of the Company as reported on the NASDAQ Global Select Market.

“Code” means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

“Commission” means the Securities and Exchange Commission, as from time to time constituted, created under the Exchange Act, or, if at any time after execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties on such date.

“Common Depository” has the meaning specified in Section 304.

“Common Stock” means, with respect to any Person, all shares of capital stock issued by such Person other than Preferred Stock.

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

“Company Request” and “Company Order” mean, respectively, a written request or order signed in the name of the Company by its Chairman of the Board, the Chief Executive Officer, the President, or a Vice President, and by its Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee.

“Constituent Person” has the meaning specified in Section 1611.

“Conversion Event” means the cessation of use of (i) a Foreign Currency both by the government of the country which issued such currency and for the settlement of transactions by a central bank or other public institutions of or within the international banking community, (ii) the ECU both within the European Monetary System and for the settlement of transactions by public institutions of or within the European Communities or (iii) any currency unit (or composite currency) other than the ECU for the purposes for which it was established.

“Conversion Price” has the meaning specified in Section 1601.

“Corporate Trust Office” means the office of the Trustee at which, at any particular time, its corporate trust business shall be principally administered, which office at the date hereof is located at [\_\_\_\_\_].

“corporation” includes corporations, associations, limited liability companies and business trusts.

“coupon” means any interest coupon appertaining to a Bearer Security.

“Covenant Defeasance” has the meaning specified in Section 1403.

“Custodian” has the meaning specified in Section 501.

“Defaulted Interest” has the meaning specified in Section 307.

“Defeasance” has the meaning specified in Section 1402.

“Distribution Record Date” has the meaning specified in Section 1611.

“Dividend Record Date” has the meaning specified in Section 1604.

“Dollar” or the sign “\$” means a dollar or other equivalent unit in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

“DTC” means The Depository Trust Company and any successor to DTC in its capacity as depository for any Securities.

“ECU” means the European Currency Unit as defined and revised from time to time by the Council of the European Communities.

“Euroclear” means Morgan Guaranty Trust Company of New York, Brussels office, or its successor, as operator of the Euroclear System.

“European Communities” means the European Economic Community, the European Coal and Steel Community and the European Atomic Energy Community.

“European Monetary System” means the European Monetary System established by the Resolution of December 5, 1978 of the Council of the European Communities.

“Event of Default” has the meaning specified in Section 501.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, as in force at the date as of which this Indenture was executed; provided, however, that in the event the Exchange Act is amended after such date, “Exchange Act” means to the extent required by any such amendment, the Exchange Act as so amended.

“Exchange Date” has the meaning specified in Section 304.



“FINRA” means the Financial Industry Regulatory Authority, Inc.

“Foreign Currency” means any currency, currency unit or composite currency, including, without limitation, the ECU issued by the government of one or more countries other than the United States of America or by any recognized confederation or association of such governments.

“GAAP” means, except as otherwise provided herein, generally accepted accounting principles, as in effect from time to time, as used in the United States applied on a consistent basis.

“Global Security” means a Security evidencing all or a part of a series of Securities issued to and registered in the name of the depository for such series, or its nominee, in accordance with Section 305, and bearing the legend prescribed in Section 203.

“Government Obligations” means (i) securities which are (A) direct obligations of the United States of America or the government which issued the Foreign Currency in which the Securities of a particular series are payable, for the payment of which its full faith and credit is pledged or (B) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America or such government which issued the Foreign Currency in which the Securities of such series are payable, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America or such other government, which, in either case, are not callable or redeemable at the option of the issuer thereof, and (iii) a depository receipt issued by a bank or trust company as custodian with respect to any such Government Obligation or a specific payment of interest on or principal of any such 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 Government Obligation or the specific payment of interest on or principal of the Government Obligation evidenced by such depository receipt.

“Holder” means, in the case of a Registered Security, the Person in whose name a Security is registered in the Security Register and, in the case of a Bearer Security, the bearer thereof and, when used with respect to any coupon, shall mean the bearer thereof.

“Indenture” means this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, and shall include the terms of particular series of Securities established as contemplated by Section 301; provided, however, that, if at any time more than one Person is acting as Trustee under this instrument, “Indenture” shall mean, with respect to any one or more series of Securities for which such Person is Trustee, this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of the or those particular series of Securities for which such Person is Trustee established as contemplated by Section 301, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is Trustee, regardless of

when such terms or provisions were adopted, and exclusive of any provisions or terms adopted by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee but to which such Person, as such Trustee, was not a party.

“Indexed Security” means a Security the terms of which provide that the principal amount thereof payable at Stated Maturity may be more or less than the principal face amount thereof at original issuance.

“Interest,” when used with respect to an Original Issue Discount Security which by its terms bears interest only after Maturity, shall mean interest payable after Maturity.

“Interest Payment Date,” when used with respect to any Security, means the Stated Maturity of an installment of interest on such Security.

“Make-Whole Amount,” when used with respect to any Security, means the amount, if any, in addition to principal (and accrued interest thereon, if any) which is required by a Security, under the terms and conditions specified therein or as otherwise specified as contemplated by Section 301, to be paid by the Company to the Holder thereof in connection with any optional redemption or accelerated payment of such Security.

“mandatory sinking fund payment” has the meaning specified in Section 1201.

“Market Value of the Distribution” has the meaning specified in Section 1604.

“Maturity,” when used with respect to any Security, means the date on which the principal (or, if the context so requires, in the case of an Original Issue Discount Security, or lesser amount or, in the case of an Indexed Security, an amount determined in accordance with the specified terms of that Security) of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, notice of redemption, notice of option to elect repayment or otherwise.

“Officers’ Certificate” means a certificate signed by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or a Vice President (whether or not designated by a number or word or words added before or after the title “Vice President”), and by the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary of the Company, and delivered to the Trustee.

“Opinion of Counsel” means a written opinion of counsel, who may be counsel for the Company or who may be an employee of or other counsel for the Company.

“optional sinking fund payment” has the meaning specified in Section 1201.

“Original Issue Discount Security” means any Security which provides for an amount (excluding any amounts attributable to accrued but unpaid interest thereon) less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 502.

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

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

(ii) Securities, or portions thereof, for whose payment or redemption (including repayment at the option of the Holder) 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 and any coupons appertaining thereto; provided, however, that, if such Securities 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;

(iii) Securities, except to the extent provided in Sections 1402 and 1403, with respect to which the Company has effected Defeasance and/or Covenant Defeasance as provided in Article Fourteen; and

(iv) Securities which have been paid pursuant to Section 306 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 the Trustee proof satisfactory to it that such Securities are held by a bona fide 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 the Outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder or are present at a meeting of Holders for quorum purposes, and for the purpose of making the calculations required by TIA Section 313, (i) the principal amount of an Original Issue Discount Security that may be counted in making such determination or calculation and that shall be deemed to be Outstanding for such purpose shall be equal to the amount of principal thereof that would be (or shall have been declared to be) due and payable, at the time of such determination, upon a declaration of acceleration of the maturity thereof pursuant to Section 502, (ii) the principal amount of any Security denominated in a Foreign Currency that may be counted in making such determination or calculation and that shall be deemed Outstanding for such purpose shall be equal to the Dollar equivalent, determined pursuant to Section 301 as of the date such Security is originally issued by the Company, of the principal amount (or, in the case of an Original Issue Discount Security, the Dollar equivalent as of such date of original issuance of the amount determined as provided in clause (i) above) of such Security, (iii) the principal amount of any Indexed Security that may be counted in making such determination or calculation and that shall be deemed outstanding for such purpose shall be equal to the principal face amount of such Indexed Security at original issuance, unless otherwise provided with respect to such Security pursuant to Section 301, and (iv) Securities owned by the Company or any other obligor upon the Securities 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 making such calculation or in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities which a Responsible Officer of the Trustee actually knows to be so owned shall be so disregarded.

Securities owned as provided in clause (iv) above which 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 so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor. In case of a dispute as to such right, the advice of counsel shall be full protection in respect of any decision made by the Trustee in accordance with such advice.

"Paying Agent" means any Person authorized by the Company to pay the principal of (and premium or Make-Whole Amount, if any) or interest on any Securities or coupons on behalf of the Company.

"Person" means any individual, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof, or any other entity or organization.

"Place of Payment," when used with respect to the Securities of or within any series, means the place or places where the principal of (and premium or Make-Whole Amount, if any) and interest on such Securities are payable as specified as contemplated by Sections 301 and 1002.

"Predecessor Security" of any particular Security means 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 306 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security or a Security to which a mutilated, destroyed, lost or stolen coupon appertains shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security or the Security to which the mutilated, destroyed, lost or stolen coupon appertains.

"Preferred Stock" means, with respect to any Person, all capital stock issued by such Person that is entitled to a preference or priority over any other capital stock issued by such Person with respect to any distribution of such Person's assets, whether by dividend or upon any voluntary or involuntary liquidation, dissolution or winding up.

"Redemption Date," when used with respect to any Security to be redeemed, in whole or in part, means the date fixed for such redemption by or pursuant to this Indenture.

"Redemption Price," when used with respect to any Security to be redeemed, means the price specified in the related Officers' Certificate or supplemental indenture contemplated by and pursuant to Section 301, at which it is to be redeemed pursuant to this Indenture.

"Reference Date" has the meaning specified in Section 1604.

"Registered Security" shall mean any Security which is registered in the Security Register.

"Regular Record Date" for the interest payable on any Interest Payment Date on the Registered Securities of or within any series means the date specified for that purpose as contemplated by Section 301, whether or not a Business Day.

“Repayment Date” means, when used with respect to any Security to be repaid at the option of the Holder, the date fixed for such repayment by or pursuant to this Indenture.

“Repayment Price” means, when used with respect to any Security to be repaid at the option of the Holder, the price at which it is to be repaid by or pursuant to this Indenture.

“Responsible Officer,” when used with respect to the Trustee, means any Vice President (whether or not designated by a number or a word or words added before or after the title “Vice President”), Assistant Vice President, Trust Officer or Assistant Trust Officer working in its Corporate Trust Department, or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and working in its Corporate Trust Department, and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of such officer’s knowledge and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

“Rights” has the meaning specified in Section 1604.

“Rights Record Date” has the meaning specified in Section 1604.

“Security” and “Securities” has the meaning stated in the first recital of this Indenture and, more particularly, means any Security or Securities authenticated and delivered under this Indenture; provided, however, that, if at any time there is more than one Person acting as Trustee under this Indenture, “Securities” with respect to the Indenture as to which such Person is Trustee shall have the meaning stated in the first recital of this Indenture and shall more particularly mean Securities authenticated and delivered under this Indenture, exclusive, however, of Securities of any series as to which such Person is not Trustee.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 305.

A “Series” of Securities means all securities denoted as part of the same series authorized by or pursuant to a particular Board Resolution.

“Short Term Rights” has the meaning specified in Section 1604.

“Significant Subsidiary” means any Subsidiary which is a “significant subsidiary” (as defined in Article I, Rule 1-02 of Regulation S-X, promulgated under the Securities Act of 1933, as amended) of the Company.

“Special Record Date” for the payment of any Defaulted Interest on the Registered Securities of or within any series means a date fixed by the Company pursuant to Section 307.

“Stated Maturity,” when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security or a coupon representing such installment of interest as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“Subsidiary” means, with respect to any Person, any corporation, limited liability company, partnership or other entity of which a majority of (i) the voting power of the voting equity securities or (ii) the outstanding equity interests are owned, directly or indirectly, by such Person. For the purposes of this definition, “voting equity securities” means equity securities having voting power for the election of directors, whether at all times or only so long as no senior class of security has such voting power by reason of any contingency.

“Trading Day” means any day on which the NASDAQ Global Select Market is open for business.

“Trigger Events” has the meaning specified in Section 1604.

“Trust Indenture Act” or “TIA” means the Trust Indenture Act of 1939, as amended and as in force at the date as of which this Indenture was executed, except as provided in Section 905.

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

“Unadjusted Distribution” has the meaning specified in Section 1604.

“United States” means, unless otherwise specified with respect to any Securities pursuant to Section 301, the United States of America (including the states and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction.

“United States Person” means, unless otherwise specified with respect to any Securities pursuant to Section 301, an individual who is a citizen or resident of the United States, a corporation, partnership or other entity created or organized in or under the laws of the United States or an estate or trust the income of which is subject to United States Federal income taxation regardless of its source.

“Yield to Maturity” means the yield to maturity, computed at the time of issuance of a Security (or, if applicable, at the most recent redetermination of interest on such Security) and as set forth in such Security in accordance with generally accepted United States bond yield computation principles.

**SECTION 102. Compliance Certificates and Opinions.** Upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee an Officers’ 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, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by



any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (including certificates delivered pursuant to Section 1008) shall include:

- (1) a statement that each individual signing such certificate or opinion has read such condition or covenant and the definitions herein relating thereto;
- (2) 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;
- (3) a statement that, in the opinion of each such individual, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such condition or covenant has been complied with; and
- (4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

**SECTION 103. Form of Documents Delivered to Trustee.** 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.

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

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 104. Acts of Holders.**

(a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of the Outstanding

Securities of all series or one or more series, as the case may be, may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by agents duly appointed in writing. If Securities of a series are issuable as Bearer Securities, any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of Securities of such series may, alternatively, be embodied in and evidenced by the record of Holders of Securities of such series voting in favor thereof, either in person or by proxies duly appointed in writing, at any meeting of Holders of Securities of such series duly called and held in accordance with the provisions of Article Fifteen, or a combination of such instruments and any such record. Except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments or record or both are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments and any such record (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments or so voting at any such meeting. Proof of execution of any such instrument or of a writing appointing any such agent, or of the holding by any Person of a Security, shall be sufficient for any purpose of this Indenture and conclusive in favor of the Trustee and the Company and any agent of the Trustee or the Company, if made in the manner provided in this Section. The record of any meeting of Holders of Securities shall be proved in the manner provided in Section 1506.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of his authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other reasonable manner which the Trustee deems sufficient.

(c) The ownership of Registered Securities shall be proved by the Security Register. As to any matter relating to beneficial ownership interests in any Global Security, the appropriate depository's records shall be dispositive for purposes of this Indenture.

(d) The ownership of Bearer Securities may be proved by the production of such Bearer Securities or by a certificate executed, as depository, by any trust company, bank, banker or other depository, wherever situated, if such certificate shall be deemed by the Trustee to be satisfactory, showing that at the date therein mentioned such Person had on deposit with such depository, or exhibited to it, the Bearer Securities therein described; or such facts may be proved by the certificate or affidavit of the Person holding such Bearer Securities, if such certificate or affidavit is deemed by the Trustee to be satisfactory. The Trustee and the Company may assume that such ownership of any Bearer Security continues until (1) another certificate or affidavit bearing a later date issued in respect of the same Bearer Security is produced, or (2) such Bearer Security is produced to the Trustee by some other Person, or (3) such Bearer Security is surrendered in exchange for a Registered Security, or (4) such Bearer Security is no longer Outstanding. The ownership of Bearer Securities may also be proved in any other manner which the Trustee deems sufficient.



(e) If the Company shall solicit from the Holders of Registered Securities any request, demand, authorization, direction, notice, consent, waiver or other Act, the Company may, at its option, in or pursuant to a Board Resolution, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other Act, but the Company shall have no obligation to do so. Notwithstanding TIA Section 316(c), such record date shall be the record date specified in or pursuant to such Board Resolution, which shall be a date not earlier than the date 30 days prior to the first solicitation of Holders generally in connection therewith and not later than the date such solicitation is completed. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other Act may be given before or after such record date, but only the Holders of record at the close of business on such record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of Outstanding Securities have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other Act, and for that purpose the Outstanding Securities shall be computed as of such record date; provided that no such authorization, agreement or consent by the Holders on such record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than eleven months after the record date.

(f) Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or upon the conversion thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee, any Security Registrar, any Paying Agent, any Authenticating Agent or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

**SECTION 105. Notices, etc., to Trustee and Company.** Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing to or with the Trustee at [ ] or at any other address previously furnished in writing to the Company by the Trustee, Attention: [ ]; or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to the Company addressed to it at the address of its principal office specified in the first paragraph of this Indenture or at any other address previously furnished in writing to the Trustee by the Company, Attention: [ ]; or

(3) either the Trustee or the Company, by the other party or by any Holder, shall be sufficient for every purpose hereunder if given by facsimile transmission, receipt confirmed by telephone followed by an original copy delivered by guaranteed overnight courier; if to the Trustee at facsimile number [ ]; and if to the Company at facsimile number [ ].

**SECTION 106. Notice to Holders; Waiver.** Where this Indenture provides for notice of any event to Holders of Registered Securities by the Company or the Trustee, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each such Holder affected by such event, at his address as it appears in the Security Register, not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. In any case where notice to Holders of Registered Securities 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 of Registered Securities or the sufficiency of any notice to Holders of Bearer Securities given as provided herein. Any notice mailed to a Holder in the manner herein prescribed shall be conclusively deemed to have been received by such Holder, whether or not such Holder actually receives such notice.

If by reason of the suspension of or irregularities in regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification to Holders of Registered Securities as shall be made with the approval of the Trustee shall constitute a sufficient notification to such Holders for every purpose hereunder.

Except as otherwise expressly provided herein or otherwise specified with respect to any Securities pursuant to Section 301, where this Indenture provides for notice to Holders of Bearer Securities of any event, such notice shall be sufficiently given if published in an Authorized Newspaper in The City of New York and in such other city or cities as may be specified in such Securities on a Business Day, such publication to be not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once, on the date of the first such publication.

If by reason of the suspension of publication of any Authorized Newspaper or Authorized Newspapers or by reason of any other cause it shall be impracticable to publish any notice to Holders of Bearer Securities as provided above, then such notification to Holders of Bearer Securities as shall be given with the approval of the Trustee shall constitute sufficient notice to such Holders for every purpose hereunder. Neither the failure to give notice by publication to any particular Holder of Bearer Securities as provided above, nor any defect in any notice so published, shall affect the sufficiency of such notice with respect to other Holders of Bearer Securities or the sufficiency of any notice to Holders of Registered Securities given as provided herein.

Any request, demand, authorization, direction, notice, consent or waiver required or permitted under this Indenture shall be in the English language, except that any published notice may be in an official language of the country of publication.

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 upon such waiver.

**SECTION 107. Counterparts; Effect of Headings and Table of Contents.** 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 Indenture. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

**SECTION 108. Successors and Assigns.** All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

**SECTION 109. Severability Clause.** In case any provision in this Indenture or in any Security or coupon shall be held invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

**SECTION 110. Benefits of Indenture.** Nothing in this Indenture or in the Securities or coupons, if any, express or implied, shall give to any Person, other than the parties hereto, any Security Registrar, any Paying Agent, any Authenticating Agent and their successors hereunder and the Holders any benefit or any legal or equitable right, remedy or claim under this Indenture.

**SECTION 111. Governing Law.** This Indenture and the Securities and coupons shall be governed by and construed in accordance with the laws of the State of New York. This Indenture is subject to the provisions of the TIA that are required to be part of this Indenture and shall, to the extent applicable, be governed by such provisions.

**SECTION 112. Legal Holidays.** In any case where any Interest Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity of any Security or the last date on which a Holder has the right to convert or exchange a Security shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or any Security or coupon other than a provision in the Securities of any series which specifically states that such provision shall apply in lieu hereof), payment of interest or principal (and premium or Make-Whole Amount, if any) or conversion or exchange of such Security need not be made at such Place of Payment on such date, but (except as otherwise provided in the supplemental indenture with respect to such Security) may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date, Redemption Date, Repayment Date or sinking fund payment date, or at the Stated Maturity or Maturity, or on such last day for conversion or exchange, provided that no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity, as the case may be.

**SECTION 113. Limited Liability; Immunity of Stockholders, Directors, Officers and Agents of the Company.** Notwithstanding any other provision of this Indenture or of the Securities of any series to the contrary, no recourse under or upon any obligation, covenant or agreement contained in this Indenture or in any Security, or for the payment of any sums due on account of any indebtedness evidenced thereby, including without limitation principal, premium or interest, if any, or for any claim based on this Indenture or any Security or otherwise in respect of this Indenture or any Security, shall be had, whether by levy or execution or

otherwise, against (i) the Company, the Company's assets or against any past, present or future stockholder, employee, officer, director or agent, as such, of the Company or any successor, either directly or through the Company or any successor, under any rule of law, statute, constitutional provision or by the enforcement of any assessment or penalty, or by any legal or equitable proceeding or otherwise, nor shall any such parties be personally liable for any such amounts, obligations or claims, or liable for any deficiency judgment based thereon or with respect thereto, it being expressly understood that the sole remedies hereunder or under any other document with respect to the Securities against such parties with respect to such amounts, obligations or claims shall be against the Company and that all such liability of and recourse against such parties is expressly waived and released by the acceptance of the Securities by the Holders and as part of the consideration for the issue of the Securities.

**SECTION 114. Conflict with Trust Indenture Act.** If any provision hereof limits, qualifies or conflicts with another provision hereof which is required or deemed to be included in this Indenture by any of the provisions of the Trust Indenture Act, such required provision shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act that may be so modified or excluded, the latter provision shall be deemed to apply to this Indenture as so modified or to be excluded, as the case may be.

## **ARTICLE 2. SECURITIES FORMS**

**SECTION 201. Forms of Securities.** The Registered Securities, if any, of each series and the Bearer Securities, if any, of each series and related coupons shall be substantially in the form of Exhibit A hereto or in such other form as shall be established in one or more indentures supplemental hereto or approved from time to time by or pursuant to a Board Resolution in accordance with Section 301, shall have such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture or any indenture supplemental hereto, 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 over-the-counter market or securities exchange, on which the Securities may be quoted or listed, or to conform to usage.

Unless otherwise specified as contemplated by Section 301, Bearer Securities shall have interest coupons attached.

The definitive Securities and coupons shall be printed, lithographed or engraved or produced by any combination of these methods on a steel engraved border or steel engraved borders or mechanically reproduced on safety paper or may be produced in any other manner, all as determined by the officers executing such Securities or coupons, as evidenced by their execution of such Securities or coupons.

**SECTION 202. Form of Trustee's Certificate of Authentication.** Subject to Section 611, the Trustee's certificate of authentication shall be in substantially the following form:

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

[NAME OF TRUSTEE], as Trustee

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Authorized Signatory

**SECTION 203. Securities Issuable in Global Form.** If Securities of or within a series are issuable in the form of one or more Global Securities, then, notwithstanding clause (9) of Section 301 and the provisions of Section 302, any such Global Security or Securities may provide that it or they shall represent the aggregate amount of all Outstanding Securities of such series (or such lesser amount as is permitted by the terms thereof) from time to time endorsed thereon and may also provide that the aggregate amount of Outstanding Securities of such series represented thereby may from time to time be increased or decreased to reflect exchanges. Any endorsement of any Global Security to reflect the amount, or any increase or decrease in the amount, or changes in the rights of Holders thereof, of Outstanding Securities represented thereby shall be made (or caused to be made) by the Trustee in such manner or by such Person or Persons as shall be specified therein or in the Company Order to be delivered to the Trustee pursuant to Section 303 or 304. Subject to the provisions of Section 303 and, if applicable, Section 304, the Trustee shall deliver and redeliver any Global Security in permanent global form in the manner and upon instructions given by the Person or Persons specified therein or in the applicable Company Order. If a Company Order pursuant to Section 303 or 304 has been, or simultaneously is, delivered, any instructions by the Company with respect to endorsement or delivery or redelivery of a Global Security shall be in writing but need not comply with Section 102 and need not be accompanied by an Opinion of Counsel.

The provisions of the last sentence of Section 303 shall apply to any Security represented by a Global Security if such Security was never issued and sold by the Company and the Company delivers to the Trustee the Global Security together with written instructions (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) with regard to the reduction in the principal amount of Securities represented thereby, together with the written statement contemplated by the last sentence of Section 303.

Notwithstanding the provisions of Section 307, unless otherwise specified as contemplated by Section 301, payment of principal of and any premium or Make-Whole Amount, if any, and interest on any Global Security in permanent global form shall be made to the registered Holder thereof.

Notwithstanding the provisions of Section 308 and except as provided in the preceding paragraph, the Company, the Trustee and any agent of the Company and the Trustee shall treat as the Holder of such principal amount of Outstanding Securities represented by a permanent Global Security (i) in the case of a permanent Global Security in registered form, the Holder of

such permanent Global Security in registered form, or (ii) in the case of a permanent Global Security in bearer form, Euroclear or Clearstream.

Any Global Security authenticated and delivered hereunder shall bear a legend in substantially the following form:

“This Security is a Global Security within the meaning set forth in the Indenture hereinafter referred to and is registered in the name of a Depository or a nominee of a Depository. This Security is exchangeable for Securities registered in the name of a person other than the Depository or its nominee only in the limited circumstances described in the Indenture, and 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 its nominee to a successor Depository or its nominee.”

**ARTICLE 3.  
THE SECURITIES**

**SECTION 301. Amount Unlimited; Issuable in Series.** The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series, each of which shall be authorized pursuant to Board Resolutions of the Company. There shall be established in one or more Board Resolutions or pursuant to authority granted by one or more Board Resolutions and, subject to Section 303, set forth in an Officers' Certificate, or established in one or more indentures supplemental hereto, prior to the issuance of Securities of any series:

(1) The title of the Securities of the series, including “CUSIP” numbers (which shall distinguish the Securities of such series from all other series of Securities);

(2) 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 authenticated and delivered upon registration of transfer of, or upon conversion of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 304, 305, 306, 906, 1107, 1305 or 1602) and the minimum authorized denominations with respect to the Securities of such series;

(3) The price (expressed as a percentage of the principal amount thereof) at which such Securities will be issued and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or (if applicable) the portion of the principal amount of such Securities that is convertible into Common Stock or the method by which any such portion shall be determined.

(4) If convertible, the terms on which such Securities are convertible, including the initial conversion price or rate and the conversion period and any applicable limitations on the ownership or transferability of Common Stock or Preferred Stock receivable on conversion;

(5) The date or dates, or the method for determining such date or dates, on which the principal of such Securities will be payable;

(6) The rate or rates (which may be fixed or variable), or the method by which such rate or rates shall be determined, at which such Securities will bear interest, if any;

(7) The date or dates, or the method for determining such date or dates, from which any such interest will accrue, the Interest Payment Dates on which any such interest will be payable, the Regular Record Dates for such Interest Payment Dates, or the method by which such dates shall be determined, the Persons to whom such interest shall be payable, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months;

(8) The Make-Whole Amount, if any, or method for determining the Make-Whole Amount, if any, payable with respect to such Securities, and the terms upon which such amount, if any, will be payable;

(9) The place or places where the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities will be payable, where such Securities may be surrendered for registration of transfer or conversion or exchange and where notices or demands to or upon the Company in respect of such Securities and this Indenture may be served;

(10) The period or periods, if any, within which, the price or prices at which and the other terms and conditions upon which such Securities may, pursuant to any optional or mandatory redemption provisions, be redeemed, as a whole or in part, at the option of the Company;

(11) The obligation, if any, of the Company to redeem, repay or purchase such Securities pursuant to any sinking fund or analogous provision or at the option of a Holder thereof, and the period or periods within which, the price or prices at which and the other terms and conditions upon which such Securities will be redeemed, repaid or purchased, as a whole or in part, pursuant to such obligation;

(12) If other than Dollars, the currency or currencies in which such Securities are denominated and payable, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies, the manner of determining the equivalent thereof in Dollars for purposes of the definition of "Outstanding" in Section 101, and the terms and conditions relating thereto;

(13) Whether the amount of payments of principal of (and premium or Make-Whole Amount, if any, including any amount due upon redemption, if any) or interest on such Securities may be determined with reference to an index, formula or other method (which index, formula or method may, but need not be, based on the yield on or trading price of other securities, including United States Treasury securities or on a currency, currencies, currency unit or units, or composite currency or currencies) and the manner in which such amounts shall be determined;

19

---

(14) Whether the principal of (and premium or Make-Whole Amount, if any) or interest on the Securities of the series are to be payable, at the election of the Company or a Holder thereof, in a currency or currencies, currency unit or units or composite currency or currencies other than that in which such Securities are denominated or stated to be payable, the period or periods within which, and the terms and conditions upon which, such election may be made, and the time and manner of, and identity of the exchange rate agent with responsibility for, determining the exchange rate between the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are denominated or stated to be payable and the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are to be so payable;

(15) Provisions, if any, granting special rights to the Holders of Securities of the series upon the occurrence of such events as may be specified;

(16) Any deletions from, modifications of or additions to the Events of Default or covenants of the Company with respect to Securities of the series, whether or not such Events of Default or covenants are consistent with the Events of Default or covenants set forth herein;

(17) Whether and under what circumstances the Company will pay any additional amounts on such Securities in respect of any tax, assessment or governmental charge and, if so, whether the Company will have the option to redeem such Securities in lieu of making such payment;

(18) Whether Securities of the series are to be issuable as Registered Securities, Bearer Securities (with or without coupons) or both, any restrictions applicable to the offer, sale or delivery of Bearer Securities and the terms upon which Bearer Securities of the series may be exchanged for Registered Securities of the series and vice versa (if permitted by applicable laws and regulations), whether any Securities of the series are to be issuable initially in temporary global form and whether any Securities of the series are to be issuable in permanent global form with or without coupons and, if so, whether beneficial owners of interests in any such permanent global Security may, or shall be required to, exchange such interests for Securities of such series and of like tenor of any authorized form and denomination and the circumstances under which any such exchanges may, or shall be required to, occur, if other than in the manner provided in the Indenture, and, if Registered Securities of the series are to be issuable as a Global Security, the identity of the depository for such series;

(19) The date as of which any Bearer Securities of the series and any temporary Global Security representing outstanding Securities of the series shall be dated if other than the date of original issuance of the first Security of the series to be issued;

(20) The Person to whom any interest on any Registered Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest the manner in which, or the Person to whom, any interest on any Bearer Security of the series shall be payable, if otherwise than upon presentation and surrender of the coupons appertaining thereto as they severally mature, and the extent to which, or the manner in which, any interest payable on a temporary Global Security on an Interest Payment Date will be paid if

20

---

other than in the manner provided herein; provided, however, in each case, that the manner of determining such Person or making such payment shall be acceptable to the Trustee (as not imposing on it any undue administrative burden or risk of liability);

(21) The applicability, if any, of the Defeasance and Covenant Defeasance provisions of Article Fourteen hereof to the Securities of the series;

(22) The obligation, if any, of the Company to permit the conversion of the Securities of such series into Common Stock or Preferred Stock, as the case may be, and the terms and conditions upon which such conversion shall be effected (including, without limitation, the initial conversion price or rate, the conversion period, any adjustment of the applicable conversion price and any requirements relative to the reservation of such shares for purposes of conversion);

(23) If the Securities of such series are to be issuable in definitive form (whether upon original issue or upon exchange of a temporary Security of such series) only upon receipt of certain certificates or other documents or satisfaction of other conditions, then the form and/or terms of such certificates, documents or conditions;

(24) Designation of the Trustee, if different from the Trustee under the Indenture, with respect to such series and the terms applicable to such Trustee (which shall be accepted by such Trustee by its execution and delivery of a supplemental indenture as provided therein); and

(25) Any other terms of the series (which terms shall not be inconsistent with the provisions of this Indenture).

All Securities of any one series and the coupons appertaining to any Bearer Securities of such series shall be substantially identical except, in the case of Registered Securities, as to denomination and except as may otherwise be provided in or pursuant to such Board Resolution (subject to Section 303) and set forth in such Officers' Certificate or in any such indenture supplemental hereto. All Securities of any one series need not be issued at the same time and, unless otherwise provided, a series may be reopened, without the consent of the Holders, for issuances of additional Securities of such series.

If any of the terms of the Securities of any series are established by action taken pursuant to one or more Board Resolutions, a copy of an appropriate record of such action(s) shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officers' Certificate setting forth the terms of the Securities of such series.

**SECTION 302. Denominations.** The Securities of each series shall be issuable in such denominations as shall be specified as contemplated by Section 3.01. With respect to Securities of any series denominated in Dollars, in the absence of any such provisions with respect to the Securities of any series, the Securities of such series, other than Global Securities (which may be of any denomination), shall be issuable in denominations of \$1,000 and any



integral multiple thereof or the equivalent amounts thereof in the case of Securities denominated in the Foreign Currency or currency unit.

**SECTION 303. Execution, Authentication, Delivery and Dating.** The Securities and any coupons appertaining thereto shall be executed on behalf of the Company by its Chairman of the Board, its Chief Executive Officer, its President, or one of its Vice Presidents, under its corporate seal reproduced thereon, and attested by its Secretary or one of its Assistant Secretaries. The signature of any of these officers on the Securities and coupons may be manual or facsimile signatures of the present or any future such authorized officer and may be imprinted or otherwise reproduced on the Securities.

Securities and coupons bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities or coupons.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series, together with any coupon appertaining thereto, executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities (accompanied by a copy of the Board Resolution and the Officers' Certificate or supplemental indenture contemplated by Section 301), and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities; provided, however, that, in connection with its original issuance, no Bearer Security shall be mailed or otherwise delivered to any location in the United States; and provided further that, unless otherwise specified with respect to any series of Securities pursuant to Section 301, a Bearer Security may be delivered in connection with its original issuance only if the Person entitled to receive such Bearer Security shall have furnished a certificate to Euroclear or Clearstream, as the case may be, in the form set forth in Exhibit B-1 to this Indenture or such other certificate as may be specified by the Company with respect to any series of Securities pursuant to Section 301, dated no earlier than 15 days prior to the earlier of the date on which such Bearer Security is delivered and the date on which any temporary Security first becomes exchangeable for such Bearer Security in accordance with the terms of such temporary Security and this Indenture. If any Security shall be represented by a permanent Global Security, then, for purposes of this Section and Section 304, the notation of a beneficial owner's interest therein upon original issuance of such Security or upon exchange of a portion of a temporary Global Security shall be deemed to be delivery in connection with its original issuance of such beneficial owner's interest in such permanent Global Security. Except as permitted by Section 306, the Trustee shall not authenticate and deliver any Bearer Security unless all appurtenant coupons for interest then matured have been detached and canceled.

If all the Securities of any series are not to be issued at one time and if the Board Resolution or supplemental indenture establishing such series shall so permit, such Company Order may set forth procedures acceptable to the Trustee for the issuance of such Securities and determining the terms of particular Securities of such series, such as interest rate or formula, maturity date, date of issuance and date from which interest shall accrue. In authenticating such Securities, and accepting the additional responsibilities under this Indenture in relation to such

Securities, the Trustee shall be entitled to receive, and (subject to TIA Section 315(a) through 315(d)) shall be fully protected in relying upon, (i) an Opinion of Counsel stating that

(a) the form or forms of such Securities and any coupons have been established in conformity with the provisions of this Indenture;

(b) the terms of such Securities and any coupons have been established in conformity with the provisions of this Indenture; and

(c) such Securities, together with any coupons appertaining thereto, when completed by appropriate insertions and executed and delivered by the Company to the Trustee for authentication in accordance with this Indenture, authenticated and delivered by the Trustee in accordance with this Indenture and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute legal, valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization and other similar laws of general applicability relating to or affecting the enforcement of creditors' rights generally and to general equitable principles; and

(ii) an Officers' Certificate stating that all conditions precedent provided for in this Indenture relating to the issuance of the Securities have been complied with and that, to the best of the knowledge of the signers of such certificate, that no Event of Default with respect to any of the Securities shall have occurred and be continuing.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities (or to enter into the related supplemental indenture, if applicable) if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties, obligations or immunities under the Securities and this Indenture or otherwise in a manner which is not reasonably acceptable to the Trustee.

Notwithstanding the provisions of Section 301 and of the preceding paragraph, if all the Securities of any series are not to be issued at one time, it shall not be necessary to deliver an Officers' Certificate otherwise required pursuant to Section 301 or a Company Order, or an Opinion of Counsel or an Officers' Certificate otherwise required pursuant to the preceding paragraph at the time of issuance of each Security of such series, but such order, opinion and certificates, with appropriate modifications to cover such future issuances, shall be delivered at or before the time of issuance of the first Security of such series.

Each Registered Security shall be dated the date of its authentication and each Bearer Security shall be dated as of the date specified as contemplated by Section 301.

No Security or coupon shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security or Security to which such coupon appertains a certificate of authentication substantially in the form provided for herein duly executed by the Trustee (subject to Section 611) by manual signature of an authorized signatory, 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. Notwithstanding the foregoing, if any Security (including a Global Security) shall have been authenticated and delivered hereunder but never issued and sold by the Company, and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 309 together with a written statement (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) stating that such Security has never been issued and sold by the Company, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

**SECTION 304. 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 which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued, in registered form, or, if authorized, in bearer form with one or more coupons or without coupons, 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. In the case of Securities of any series, such temporary Securities may be in global form.

Except in the case of temporary Global Securities (which shall be exchanged as otherwise provided herein or as otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301), if temporary Securities of any series are issued, the Company will cause definitive Securities of that 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 the temporary Securities of such series at the office or agency of the Company in a Place of Payment for that series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series (accompanied by any non-matured coupons appertaining thereto), the Company shall execute (in accordance with a Company Order delivered at or prior to the authentication of the first definitive security to such series) and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations; provided, however, that no definitive Bearer Security shall be delivered in exchange for a temporary Registered Security; and provided further that a definitive Bearer Security shall be delivered in exchange for a temporary Bearer Security only in compliance with the conditions set forth in Section 305. 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.

(b) Unless otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301, the following provisions of this Section 304(b) shall govern the exchange of temporary Securities other than through the facilities of the DTC. If any such temporary Security is issued in global form, then such temporary Global Security shall, unless otherwise provided therein, be delivered to the London office of a depository or common depository upon and pursuant to written direction of the Company (the "Common Depository"),

for the benefit of Euroclear and Clearstream, for credit to the respective accounts of the beneficial owners of such Securities (or to such other accounts as they may direct).

Without unnecessary delay but in any event not later than the date specified in, or determined pursuant to the terms of, any such temporary Global Security (the “Exchange Date”), the Company shall deliver to the Trustee definitive Securities, in aggregate principal amount equal to the principal amount of such temporary Global Security, executed by the Company. On or after the Exchange Date, such temporary Global Security shall be surrendered by the Common Depository to the Trustee, as the Company’s agent for such purpose, to be exchanged, in whole or from time to time in part, for definitive Securities without charge, and the Trustee shall authenticate and deliver, in exchange for each portion of such temporary Global Security, an equal aggregate principal amount of definitive Securities of the same series of authorized denominations and of like tenor as the portion of such temporary Global Security to be exchanged. The definitive Securities to be delivered in exchange for any such temporary Global Security shall be in bearer form, registered form, permanent global bearer form or permanent global registered form, or any combination thereof, as specified as contemplated by Section 301, and, if any combination thereof is so specified, as requested by the beneficial owner thereof (as directed by or pursuant to information provided by the Common Depository); provided, however, that, unless otherwise specified in such temporary Global Security, upon such presentation by the Common Depository, such temporary Global Security shall be accompanied by a certificate dated the Exchange Date or a subsequent date and signed by Euroclear as to the portion of such temporary Global Security held for its account then to be exchanged and a certificate dated the Exchange Date or a subsequent date and signed by Clearstream as to the portion of such temporary Global Security held for its account then to be exchanged, each in the form set forth in Exhibit B-2 to this Indenture or in such other form as may be established pursuant to Section 301; and provided further that definitive Bearer Securities shall be delivered in exchange for a portion of a temporary Global Security only in compliance with the requirements of Section 303.

Unless otherwise specified in such temporary Global Security, the interest of a beneficial owner of Securities of a series in a temporary Global Security shall be exchanged for definitive Securities of the same series and of like tenor following the Exchange Date when the account holder instructs Euroclear or Clearstream, as the case may be, to request such exchange on his behalf and delivers to Euroclear or Clearstream, as the case may be, a certificate in the form set forth in Exhibit B-1 to this Indenture (or in such other form as may be established pursuant to Section 301), dated no earlier than 15 days prior to the Exchange Date, copies of which certificate shall be available from the offices of Euroclear and Clearstream, the Trustee, any Authenticating Agent appointed for such series of Securities and each Paying Agent. Unless otherwise specified in such temporary Global Security, any such exchange shall be made free of charge to the beneficial owners of such temporary Global Security, except that a Person receiving definitive Securities must bear the cost of insurance, postage, transportation and the like unless such Person takes delivery of such definitive Securities in person at the offices of Euroclear or Clearstream. Definitive Securities in bearer form to be delivered in exchange for any portion of a temporary Global Security shall be delivered only to an address located outside the United States.

Until exchanged in full as hereinabove provided, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of the same series and of like tenor authenticated and delivered hereunder, except that, unless otherwise specified as contemplated by Section 301, interest payable on a temporary Global Security on an Interest Payment Date for Securities of such series occurring prior to the applicable Exchange Date shall be payable to Euroclear and Clearstream on such Interest Payment Date upon delivery by Euroclear and Clearstream to the Trustee of a certificate or certificates in the form set forth in Exhibit B-2 to this Indenture (or in such other forms as may be established pursuant to Section 301), for credit without further interest on or after such Interest Payment Date to the respective accounts of Persons who are the beneficial owners of such temporary Global Security on such Interest Payment Date and who have each delivered to Euroclear or Clearstream, as the case may be, a certificate dated no earlier than 15 days prior to the Interest Payment Date occurring prior to such Exchange Date in the form set forth as Exhibit B-1 to this Indenture (or in such other forms as may be established pursuant to Section 301). Notwithstanding anything to the contrary herein contained, the certifications made pursuant to this paragraph shall satisfy the certification requirements of the preceding two paragraphs of this Section 304(b) and of the third paragraph of Section 303 of this Indenture and the interests of the Persons who are the beneficial owners of the temporary Global Security with respect to which such certification was made will be exchanged for definitive Securities of the same series and of like tenor on the Exchange Date or the date of certification if such date occurs after the Exchange Date, without further act or deed by such beneficial owners. Except as otherwise provided in this paragraph, no payments of principal or interest owing with respect to a beneficial interest in a temporary Global Security will be made unless and until such interest in such temporary Global Security shall have been exchanged for an interest in a definitive Security. Any interest so received by Euroclear and Clearstream and not paid as herein provided shall be returned to the Trustee prior to the expiration of two years after such Interest Payment Date in order to be repaid to the Company.

With respect to Exhibit B-1 or B-2 to this Indenture, the Company may, in its discretion and if required or desirable under applicable law, substitute one or more other forms of such exhibits for such exhibits, eliminate the requirement that any or all certificate be provided, or change the time that any certificate may be required, provided that such substitute form or forms or notice of elimination or change of such certification requirement have theretofore been delivered to the Trustee with a Company Request and such form or forms, elimination or change is reasonably acceptable to the Trustee.

**SECTION 305. Registration, Registration of Transfer, Conversion and Exchange.** The Company shall cause to be kept at the Corporate Trust Office of the Trustee or in any office or agency of the Company in a Place of Payment a register for each series of Securities (the registers maintained in such office or in any such office or agency of the Company in a Place of Payment being herein sometimes referred to collectively as the “Security Register”) in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Registered Securities and of transfers of Registered Securities. The Security Register shall be in written form or any other form capable of being converted into written form within a reasonable time. The Trustee, at its Corporate Trust Office, is hereby initially appointed “Security Registrar” for the purpose of registering Registered

Securities and transfers of Registered Securities on such Security Register as herein provided. In the event that the Trustee shall cease to be Security Registrar, it shall have the right to examine, and be provided a copy of, the Security Register at all reasonable times.

Subject to the provisions of this Section 305, upon surrender for registration of transfer of any Registered Security of any series at any office or agency of the Company in a Place of Payment for that series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Registered Securities of the same series, of any authorized denominations and of a like aggregate principal amount, bearing a number not contemporaneously outstanding, and containing identical terms and provisions.

Subject to the provisions of this Section 305, at the option of the Holder, Registered Securities of any series may be exchanged for other Registered Securities of the same series, of any authorized denomination or denominations and of a like aggregate principal amount, containing identical terms and provisions, upon surrender of the Registered Securities to be exchanged at any such office or agency. Whenever any such Registered Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Registered Securities which the Holder making the exchange is entitled to receive. Unless otherwise specified with respect to any series of Securities as contemplated by Section 301, Bearer Securities may not be issued in exchange for Registered Securities.

If (but only if) permitted by the applicable Board Resolution and (subject to Section 303) set forth in the applicable Officers' Certificate, or in any indenture supplemental hereto, delivered as contemplated by Section 301, at the option of the Holder, Bearer Securities of any series may be exchanged for Registered Securities of the same series of any authorized denominations and of a like aggregate principal amount and tenor, upon surrender of the Bearer Securities to be exchanged at any such office or agency, with all unmatured coupons and all matured coupons in default thereto appertaining. If the Holder of a Bearer Security is unable to produce any such unmatured coupon or coupons or matured coupon or coupons in default, any such permitted exchange may be effected if the Bearer Securities are accompanied by payment in funds acceptable to the Company (or to the Trustee for the Security in case of matured coupons in default) in an amount equal to the face amount of such missing coupon or coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there is furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to any Paying Agent any such missing coupon in respect of which such a payment shall have been made, such Holder shall be entitled to receive the amount of such payment; provided, however, that, except as otherwise provided in Section 1002, interest represented by coupons shall be payable only upon presentation and surrender of those coupons at an office or agency located outside the United States. Notwithstanding the foregoing, in case a Bearer Security of any series is surrendered at any such office or agency in a permitted exchange for a Registered Security of the same series and like tenor after the close of business at such office or agency on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date or

proposed date for payment, as the case may be, and interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

Notwithstanding the foregoing, except as otherwise specified as contemplated by Section 301, any permanent Global Security shall be exchangeable only as provided in this paragraph. If the depository for any permanent Global Security is DTC, then, unless the terms of such Global Security expressly permit such Global Security to be exchanged in whole or in part for definitive Securities, a Global Security may be transferred, in whole but not in part, only to a nominee of DTC, or by a nominee of DTC to DTC, or to a successor to DTC for such Global Security selected or approved by the Company or to a nominee of such successor to DTC. If at any time DTC notifies the Company that it is unwilling or unable to continue as depository for the applicable Global Security or Securities or if at any time DTC ceases to be a clearing agency registered under the Exchange Act if so required by applicable law or regulation, the Company shall appoint a successor depository with respect to such Global Security or Securities. If (w) a successor depository for such Global Security or Securities is not appointed by the Company within 90 days after the Company receives such notice or becomes aware of such unwillingness, inability or ineligibility, (x) the Company delivers to the Trustee for Securities of such series in registered form a Company Order stating that the Securities of such series shall be exchangeable, (y) an Event of Default has occurred and is continuing and the beneficial owners representing a majority in principal amount of the applicable series of Securities represented by such Global Security or Securities advise DTC to cease acting as depository for such Global Security or Securities or (z) the Company, in its sole discretion, determines at any time that all Outstanding Securities (but not less than all) of any series issued or issuable in the form of one or more Global Securities shall no longer be represented by such Global Security or Securities, then the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities of like series, rank, tenor and terms in definitive form in an aggregate principal amount equal to the principal amount of such Global Security or Securities. If any beneficial owner of an interest in a permanent global Security is otherwise entitled to exchange such interest for Securities of such series and of like tenor and principal amount of another authorized form and denomination, as specified as contemplated by Section 301 and provided that any applicable notice provided in the permanent Global Security shall have been given, then without unnecessary delay but in any event not later than the earliest date on which such interest may be so exchanged, the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities in aggregate principal amount equal to the principal amount of such beneficial owner's interest in such permanent Global Security. On or after the earliest date on which such interests may be so exchanged, such permanent Global Security shall be surrendered for exchange by DTC or such other depository as shall be specified in the Company Order with respect thereto to the Trustee, as the Company's agent for such purpose; provided, however, that no such exchanges may occur during a period beginning at the opening of business 15 days before any selection of Securities to be redeemed and ending on the relevant Redemption Date if the Security for which exchange is requested may be among those selected for redemption; and provided further that no Bearer

Security delivered in exchange for a portion of a permanent Global Security shall be mailed or otherwise delivered to any location in the United States. If a Registered Security is issued in exchange for any portion of a permanent Global Security after the close of business at the office or agency where such exchange occurs on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of such Registered Security, but will be payable on such Interest Payment Date or proposed date for payment, as the case may be, only to the Person to whom interest in respect of such portion of such permanent Global Security is payable in accordance with the provisions of this Indenture.

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

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

No service charge shall be made to the Holder for any registration of transfer or conversion or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or conversion or exchange of Securities, other than exchanges pursuant to Section 304, 906, 1107, 1305 or 1604 not involving any transfer.

The Company or the Trustee, as applicable, shall not be required (i) to issue, register the transfer of or exchange any Security if such Security may be among those selected for redemption during a period beginning at the opening of business 15 days before selection of the Securities to be redeemed under Section 1103 and ending at the close of business on (A) if such Securities are issuable only as Registered Securities, the day of the mailing of the relevant notice of redemption and (B) if such Securities are issuable as Bearer Securities, the day of the first publication of the relevant notice of redemption or, if such Securities are also issuable as Registered Securities and there is no publication, the mailing of the relevant notice of redemption, or (ii) to register the transfer of or exchange any Registered Security so selected for redemption in whole or in part, except, in the case of any Registered Security to be redeemed in part, the portion thereof not to be redeemed, or (iii) to exchange any Bearer Security so selected for redemption except that such a Bearer Security may be exchanged for a Registered Security of that series and like tenor, provided that such Registered Security shall be simultaneously surrendered for redemption, or (iv) to issue, register the transfer of or exchange any Security which has been surrendered for repayment at the option of the Holder, except the portion, if any, of such Security not to be so repaid.

29

---

Furthermore, notwithstanding any other provision of this Section 305, the Company will not be required to exchange any Securities if, as a result of the exchange, the Company would suffer adverse consequences under any United States law or regulation.

**SECTION 306. Mutilated, Destroyed, Lost and Stolen Securities.** If any mutilated Security or a Security with a mutilated coupon appertaining to it is surrendered to the Trustee or the Company, together with, in proper cases, such security or indemnity as may be required by the Company or the Trustee to save each of them or any agent of either of them harmless, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to the surrendered Security.

If there shall be delivered to the Company and to the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security or coupon, and (ii) such security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of notice to the Company or the Trustee that such Security or coupon has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security or in exchange for the Security to which a destroyed, lost or stolen coupon appertains (with all appurtenant coupons not destroyed, lost or stolen), a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains.

Notwithstanding the provisions of the previous two paragraphs, in case any such mutilated, destroyed, lost or stolen Security or coupon has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains, pay such Security or coupon if the applicant for such payment shall furnish to the Company and the Trustee for such Security such security or indemnity as may be required by them to save each of them harmless, and in the case of destruction, loss or theft, evidence satisfactory to the Company and Trustee and any agent of any of them of the destruction, loss or theft of such Security and the ownership thereof; provided, however, that payment of principal of (and premium or Make-Whole Amount, if any), and interest, if any, on, Bearer Securities shall, except as otherwise provided in Section 1002, be payable only at an office or agency located outside the United States and, unless otherwise specified as contemplated by Section 301, any interest on Bearer Securities shall be payable only upon presentation and surrender of the coupons appertaining thereto.

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 relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

30

---



Every new Security of any series with its coupons, if any, issued pursuant to this Section in lieu of any destroyed, lost or stolen Security, or in exchange for a Security to which a destroyed, lost or stolen coupon appertains, shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security and its coupons, if any, or the destroyed, lost or stolen coupon 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 and their coupons, if any, duly issued hereunder.

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 or coupons.

**SECTION 307. Payment of Interest; Interest Rights Preserved.** Except as otherwise specified with respect to a series of Securities in accordance with the provisions of Section 301, interest on any Registered 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 that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest payment at the office or agency of the Company maintained for such purpose pursuant to Section 1002; provided, however, that each installment of interest on any Registered Security may at the Company's option be paid by (i) mailing a check for such interest, payable to or upon the written order of the Person entitled thereto pursuant to Section 308, to the address of such Person as it appears on the Security Register or (ii) transfer to an account maintained by the payee located inside the United States.

Unless otherwise provided as contemplated by Section 301 with respect to the Securities of any series, payment of interest may be made, in the case of a Bearer Security, by transfer to an account maintained by the payee with a bank located outside the United States.

Unless otherwise provided as contemplated by Section 301, every permanent Global Security will provide that interest, if any, payable on any Interest Payment Date will be paid to DTC, Euroclear and/or Clearstream, as the case may be, with respect to that portion of such permanent Global Security held for its account by Cede & Co. or the Common Depository, as the case may be, for the purpose of permitting such party to credit the interest received by it in respect of such permanent Global Security to the accounts of the beneficial owners thereof.

In case a Bearer Security of any series is surrendered in exchange for a Registered Security of such series after the close of business (at an office or agency in a Place of Payment for such series) on any Regular Record Date and before the opening of business (at such office or agency) on the next succeeding Interest Payment Date, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date and interest will not be payable on such Interest Payment Date in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

Except as otherwise specified with respect to a series of Securities in accordance with the provisions of Section 301, any interest on any Registered Security of any series 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 registered Holder thereof on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, 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 Registered Security of such series and the date of the proposed payment (which shall not be less than 20 days after such notice is received by the Trustee), and at the same time the Company shall deposit with the Trustee an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) 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 on or 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 days and not less than 10 days prior to the date of the proposed payment and not less than 10 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 each Holder of Registered Securities of such series at his address as it appears in the Security Register not less than 10 days prior to such Special Record Date. The Trustee may, in its discretion, in the name and at the expense of the Company, cause a similar notice to be published at least once in an Authorized Newspaper in each Place of Payment, but such publications shall not be a condition precedent to the establishment of 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 the Registered Securities of such series (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 (2). In case a Bearer Security of any series is surrendered at the office or agency in a Place of Payment for such series in exchange for a Registered Security of such series after the close of business at such office or agency on any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such proposed date of payment and Defaulted Interest will not be payable on such proposed date of payment in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

(2) The Company may make payment of any Defaulted Interest on the Registered Securities of any series in any other lawful manner not inconsistent with the requirements of any over-the-counter market or securities exchange on which such Securities may be quoted or listed, and upon such notice as may be required by such market or 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.

Subject to the foregoing provisions of this Section and Section 305, each Security delivered under this Indenture upon registration of transfer of or upon conversion of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

**SECTION 308. Persons Deemed Owners.** Prior to due presentment of a Registered Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name such Registered Security is registered as the owner of such Security for the purpose of receiving payment of principal of (and premium or Make-Whole Amount, if any), and (subject to Sections 305 and 307) interest on, such Registered Security and for all other purposes whatsoever, whether or not such Registered 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 such payments so made to any such Person, or upon such Person's order, shall be valid, and, to the extent of the sum or sums so paid, effectual to satisfy and discharge the liability for money payable upon any such Security.

Title to any Bearer Security and any coupons appertaining thereto shall pass by delivery. The Company, the Trustee and any agent of the Company or the Trustee may treat the Holder of any Bearer Security and the Holder of any coupon as the absolute owner of such Security or coupon for the purpose of receiving payment thereof or on account thereof and for all other purposes whatsoever, whether or not such Security or coupon 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.

No holder of any beneficial interest in any Global Security held on its behalf by a depository shall have any rights under this Indenture with respect to such Global Security and such depository (which is the Holder of such security) shall be treated by the Company, the Trustee, and any agent of the Company or the Trustee as the owner of such Global Security for all purposes whatsoever. None of the Company, the Trustee, any Paying Agent or the Security Registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests of a Global Security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Notwithstanding the foregoing, with respect to any Global Security, nothing herein shall prevent the Company, the Trustee, or any agent of the Company or the Trustee, from giving effect to any written certification, proxy or other authorization furnished by any depository, as a Holder, with respect to such Global Security or impair, as between such depository and owners of beneficial interests in such Global Security, the operation of customary practices governing the exercise of the rights of such depository (or its nominee) as Holder of such Global Security.

**SECTION 309. Cancellation.** All Securities and coupons surrendered for payment, redemption, repayment at the option of the Holder, registration of transfer or conversion or exchange or for credit against any sinking fund payment shall, if surrendered to

any Person other than the Trustee, be delivered to the Trustee, and any such Securities and coupons and Securities and coupons surrendered directly to the Trustee for any such purpose, upon direction by the Company, shall be promptly cancelled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly cancelled by the Trustee. If the Company shall so acquire any of the Securities, however, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are surrendered to the Trustee for cancellation. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section, except as expressly permitted by this Indenture. Cancelled Securities and coupons held by the Trustee shall be disposed of by the Trustee in accordance with its customary practices (subject to the record retention requirements of the Exchange Act).

**SECTION 310. Computation of Interest.** Except as otherwise specified as contemplated by Section 301 with respect to Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

**SECTION 311. CUSIP Numbers.** The Company in issuing the Securities may use “CUSIP” numbers (if then generally in use), and, if so, the Trustee shall use “CUSIP” numbers in notices of redemption as a convenience to Holders; provided, however, 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 of any change in the “CUSIP” numbers.

#### **ARTICLE 4. SATISFACTION AND DISCHARGE**

**SECTION 401. Satisfaction and Discharge of Indenture.** This Indenture shall upon Company Request cease to be of further effect with respect to any series of Securities specified in such Company Request (except as to any surviving rights of registration of transfer or conversion or exchange of Securities of such series herein expressly provided for), and the Trustee, upon receipt of a Company Order, and at the expense of the Company, shall execute instruments in form and substance satisfactory to the Trustee and the Company acknowledging satisfaction and discharge of this Indenture as to such series when

(1) either

(A) all Securities of such series theretofore authenticated and delivered and all coupons, if any, appertaining thereto (other than (i) coupons appertaining to Bearer Securities surrendered for exchange for Registered Securities and maturing after such exchange, whose surrender is not required or has been waived as provided in Section 305, (ii) Securities and coupons of such series which have been destroyed, lost or stolen and which have been

replaced or paid as provided in Section 306, (iii) coupons appertaining to Securities called for redemption and maturing after the relevant Redemption Date, whose surrender has been waived as provided in Section 1106, and (iv) Securities and coupons of such series 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 1003) have been delivered to the Trustee for cancellation; or

(B) all Securities of such series and, in the case of (i) or (ii) below, any coupons appertaining thereto not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

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

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

and the Company, in the case of (i), (ii) or (iii) above, has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose an amount in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable, sufficient to pay and discharge the entire indebtedness on such Securities and such coupons not theretofore delivered to the Trustee for cancellation, for principal (and premium or Make-Whole Amount, if any) and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

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

(3) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture as to such series have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee and any predecessor Trustee under Section 606, the obligations of the Company to any Authenticating Agent under Section 611 and, if money shall have been deposited with and held by the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 402 and the last paragraph of Section 1003 shall survive such satisfaction and discharge.

**SECTION 402. Application of Trust Funds.** Subject to the provisions of the last paragraph of Section 1003, all money deposited with the Trustee pursuant to Section 401 shall be held in trust and applied by it, in accordance with the provisions of the Securities, the coupons and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled

thereto, of the principal (and premium or Make-Whole Amount, if any), and any interest for whose payment such money has been deposited with or received by the Trustee, but such money need not be segregated from other funds except to the extent required by law.

## **ARTICLE 5. REMEDIES**

**SECTION 501. Events of Default.** “Event of Default,” wherever used herein with respect to any particular series of Securities, means any one of the following events (whatever the reason for such Event of Default and whether or not it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

- (1) default in the payment of any interest on any Security of that series or of any coupon appertaining thereto, when such interest or coupon becomes due and payable, and continuance of such default for a period of 30 days; or
- (2) default in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of that series when it becomes due and payable at its Maturity; or
- (3) default in the deposit of any sinking fund payment, to the extent applicable to such series of Securities, when and as due by the terms of any Security of that series; or
- (4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture with respect to any Security of that series (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of a series of Securities other than that series), and continuance of such default or breach for a period of 60 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities of that series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a “Notice of Default” hereunder; or
- (5) default under any bond, debenture, note, mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any indebtedness for money borrowed by the Company (or by any Subsidiary, the repayment of which the Company has guaranteed or for which the Company is directly responsible or liable as obligor or guarantor), having an aggregate principal amount outstanding of at least \$30,000,000, whether such indebtedness now exists or shall hereafter be created, which default shall have resulted in such indebtedness becoming or being declared due and payable prior to the date on which it would otherwise have become due and payable, without such indebtedness having been discharged, or such acceleration having been rescinded or annulled, within a period of 30 days after there shall have been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 10% in principal amount of the Outstanding Securities of that series a written notice specifying such default and requiring the

Company to cause such indebtedness to be discharged or cause such acceleration to be rescinded or annulled and stating that such notice is a “Notice of Default” hereunder; provided, however, that, subject to the provisions of Sections 601 and 602, the Trustee shall not be deemed to have knowledge of such default unless either (A) a Responsible Officer of the Trustee shall have knowledge of such default or (B) the Trustee shall have received written notice thereof from the Company, from any Holder, from the holder of any such indebtedness or from the trustee under any such mortgage, indenture or other instrument; or

(6) the Company or any Significant Subsidiary pursuant to or within the meaning of any Bankruptcy Law:

- (A) commences a voluntary case,
- (B) consents to the entry of an order for relief against it in an involuntary case,
- (C) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
- (D) makes a general assignment for the benefit of its creditors; or

(7) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

- (A) is for relief against the Company or any Significant Subsidiary in an involuntary case,
- (B) appoints a Custodian of the Company or any Significant Subsidiary or for all or substantially all of either of its property,

or

(C) orders the liquidation of the Company or any Significant Subsidiary, and the order or decree remains unstayed and in effect for 90 days; or

(8) any other Event of Default provided with respect to Securities of that series.

As used in this Section 501, the term “Bankruptcy Law” means title 11, U.S. Code or any similar Federal or state law for the relief of debtors and the term “Custodian” means any receiver, trustee, assignee, liquidator or other similar official under any Bankruptcy Law.

**SECTION 502. Acceleration of Maturity; Rescission and Annulment.** If an Event of Default with respect to Securities of any series at the time Outstanding occurs and is continuing, then and in every such case the Trustee or the Holders of not less than 25% in principal amount of the Outstanding Securities of that series may declare the principal amount (or, if Securities of that Series are Original Issue Discount Securities or Indexed Securities, such portion of the principal as may be specified in the terms thereof) of all the Securities of that series to be due and payable immediately, by a notice in writing to the Company (and to the

Trustee if given by the Holders), and upon any such declaration such principal or specified portion thereof shall become immediately due and payable.

At any time after such a declaration of acceleration with respect to Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article provided, the Holders of a majority in principal amount of the Outstanding Securities of that series, by written notice to the Company and the Trustee, may rescind and annul such declaration of acceleration and its consequences if:

(1) the Company has paid or deposited with the Trustee a sum sufficient to pay in the currency, currency unit or composite currency in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series):

(A) all overdue installments of interest on all Outstanding Securities of that series and any related coupons,

(B) the principal of (and premium or Make-Whole Amount, if any, on) any Outstanding Securities of that series which have become due otherwise than by such declaration of acceleration and interest thereon at the rate or rates borne by or provided for in such Securities,

(C) to the extent that payment of such interest is lawful, interest upon overdue installments of interest at the rate or rates borne by or provided for in such Securities, and

(D) all sums paid or advanced by the Trustee hereunder and the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel; and

(2) all Events of Default with respect to Securities of that series, other than the nonpayment of the principal of (or premium or Make-Whole Amount, if any) or interest on Securities of that series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 513.

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

**SECTION 503. Collection of Indebtedness and Suits for Enforcement by Trustee.** The Company covenants that if:

(1) default is made in the payment of any installment of interest on any Security of any series and any related coupon when such interest becomes due and payable and such default continues for a period of 30 days, or

(2) default is made in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of any series at its Maturity,



then the Company will, upon demand of the Trustee, pay to the Trustee, for the benefit of the Holders of such Securities of such series and coupons, the whole amount then due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, with interest upon any overdue principal (and premium or Make-Whole Amount, if any) and, to the extent that payment of such interest shall be legally enforceable, upon any overdue installments of interest at the rate or rates borne by or provided for in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, and may prosecute such proceeding to judgment or final decree, and may enforce the same against the Company or any other obligor upon such Securities of such series and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities of such series, wherever situated.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series and any related coupons by such appropriate judicial proceedings as the Trustee shall deem necessary to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

**SECTION 504. Trustee May File Proofs of Claim.** In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities of any series shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal, premium or Make-Whole Amount, if any, or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise:

- (i) to file and prove a claim for the whole amount, or such lesser amount as may be provided for in the Securities of such series, of principal (and premium or Make-Whole Amount, if any) and interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceeding, and
- (ii) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

39

---

and any custodian, receiver, assignee, trustee, liquidator, sequestrator (or other similar official) in any such judicial proceeding is hereby authorized by each Holder of Securities of such series and coupons to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee and any predecessor Trustee, their agents and counsel, and any other amounts due the Trustee or any predecessor Trustee under Section 606.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder of a Security or coupon any plan of reorganization, arrangement, adjustment or composition affecting the Securities or coupons or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder of a Security or coupon in any such proceeding.

In any proceedings brought by the Trustee (and also any proceedings involving the interpretation of any provision of this Indenture to which the Trustee shall be a party) the Trustee shall be held to represent all the Holders of the Securities, and it shall not be necessary to make any Holders of the Securities parties to any such proceedings.

**SECTION 505. Trustee May Enforce Claims Without Possession of Securities or Coupons.** All rights of action and claims under this Indenture or any of the Securities or coupons may be prosecuted and enforced by the Trustee without the possession of any of the Securities or coupons or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Securities and coupons in respect of which such judgment has been recovered.

**SECTION 506. Application of Money Collected.** Any money collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal (or premium or Make-Whole Amount, if any) or interest, upon presentation of the Securities or coupons, or both, as the case may be, and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee and any predecessor Trustee under Section 606;

SECOND: To the payment of the amounts then due and unpaid upon the Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the aggregate amounts due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, respectively; and

THIRD: To the payment of the remainder, if any, to the Company.

40

---

**SECTION 507. Limitation on Suits.** No Holder of any Security of any series or any related coupon shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless:

- (1) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that series;
- (2) the Holders of not less than 25% in principal amount of the Outstanding Securities of that series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
- (3) such Holder or Holders have offered to the Trustee indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities to be incurred in compliance with such request;
- (4) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and
- (5) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the Outstanding Securities of that series;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders, or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders.

**SECTION 508. Unconditional Right of Holders to Receive Principal, Premium or Make-Whole Amount, if any, and Interest.**

Notwithstanding any other provision in this Indenture, the Holder of any Security or coupon shall have the right which is absolute and unconditional to receive payment of the principal of (and premium or Make-Whole Amount, if any) and (subject to Sections 305 and 307) interest on such Security or payment of such coupon on the respective due dates expressed in such Security or coupon (or, in the case of redemption, on the Redemption Date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

**SECTION 509. Restoration of Rights and Remedies.**

If the Trustee or any Holder of a Security or coupon has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, the Company, the Trustee and the Holders of Securities and coupons shall, subject to any determination in such proceeding, be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

**SECTION 510. Rights and Remedies Cumulative.** Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities or coupons in the last paragraph of Section 306, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders of Securities or coupons is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

**SECTION 511. Delay or Omission Not Waiver.** No delay or omission of the Trustee or of any Holder of any Security or coupon to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders of Securities or coupons, as the case may be.

**SECTION 512. Control by Holders of Securities.** The Holders of not less than a majority in principal amount of the Outstanding Securities of any series shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Securities of such series, provided that:

- (1) such direction shall not be in conflict with any rule of law or with this Indenture,
- (2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction, and
- (3) the Trustee need not take any action which might involve it in personal liability or be unduly prejudicial to the Holders of Securities of such series not joining therein.

Nothing in this Indenture shall impair the right of the Trustee in its discretion to take any action deemed proper by the Trustee and which is not inconsistent with such direction by Holders.

**SECTION 513. Waiver of Past Defaults.** The Holders of not less than a majority in principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series and any related coupons waive any past default hereunder with respect to such series and its consequences, except a default

- (1) in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series or any related coupons, or

(2) in respect of a covenant or provision hereof which under Article Nine cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected; or

(3) in respect of a covenant or provision hereof for the benefit or protection of the Trustee, without its express written consent.

Upon any such waiver, such default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other default or Event of Default or impair any right consequent thereon.

**SECTION 514. Waiver of Usury, Stay or Extension Laws.** The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

**SECTION 515. Undertaking for Costs.** All parties to this Indenture agree, and each Holder of any Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in such suit having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the Outstanding Securities of any series, or to any suit instituted by any Holder for the enforcement of the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security on or after the respective Stated Maturities expressed in such Security (or, in the case of redemption, on or after the Redemption Date).

## **ARTICLE 6. THE TRUSTEE**

**SECTION 601. Notice of Defaults.** Within 90 days after the occurrence of any default hereunder with respect to the Securities of any series, the Trustee shall transmit in the manner and to the extent provided in TIA Section 313(c), notice of such default hereunder known to the Trustee, unless such default shall have been cured or waived; provided, however, that, except in the case of a default in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series, or in the payment of any sinking or purchase fund installment with respect to the Securities of such series, the Trustee

shall be protected in withholding such notice if and so long as the board of directors, the executive committee, or a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interests of the Holders of the Securities and coupons of such series; and provided further that in the case of any default or breach of the character specified in Section 501(4) with respect to the Securities and coupons of such series, no such notice to Holders shall be given until at least 60 days after the occurrence thereof. For the purpose of this Section, the term "default" means any event which is, or after notice or lapse of time or both would become, an Event of Default with respect to the Securities of such series.

**SECTION 602. Certain Rights of Trustee.** Subject to the provisions of TIA Section 315(a) through 315(d):

(1) the Trustee may conclusively rely and shall be fully protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, coupon or other paper or document (whether in its original or facsimile form) reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties;

(2) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order (other than delivery of any Security, together with any coupons appertaining thereto, to the Trustee for authentication and delivery pursuant to Section 303 which shall be sufficiently evidenced as provided therein) and any resolution of the Board of Directors may be sufficiently evidenced by a Board Resolution;

(3) 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 (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officers' Certificate;

(4) the Trustee may consult with counsel of its own selection and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders of Securities of any series or any related coupons pursuant to this Indenture, unless such Holders shall have offered to the Trustee security or indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;

(6) 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, coupon or other paper or document, unless requested in writing so to do by the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series; provided that, if the payment within

a reasonable time to the Trustee of the costs, expenses or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require reasonable indemnity against such expenses or liabilities as a condition to proceeding; the reasonable expenses of every such examination shall be paid by the Holders or, if paid by the Trustee, shall be repaid by the Holders upon demand. The Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, relevant to the facts or matters that are the subject of its inquiry, personally or by agent or attorney at the expense of the Company and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation;

(7) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(8) the Trustee shall not be liable for any action taken, suffered or omitted by it in good faith and reasonably believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(9) any permissive right or power available to the Trustee under this Indenture or any supplement hereto shall not be construed to be a mandatory duty or obligation;

(10) the Trustee shall not be charged with knowledge of any matter (including any default, other than as described in Section 501(1), (2) or (3)) unless and except to the extent actually known to a Responsible Officer of the Trustee or to the extent written notice thereof is received by the Trustee at the Corporate Trust Office;

(11) the Trustee shall have no liability for any inaccuracy in the books and records of, or for any actions or omissions of, DTC, Euroclear or Clearstream or any depository acting on behalf of any of them;

(12) 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 by the Trustee to act hereunder; and

(13) the Trustee may request that the Company deliver an Officers' Certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officers' Certificate may be signed by any person authorized to sign an Officers' Certificate, including any person specified as so authorized in any such certificate previously delivered and not superseded.

The Trustee shall not be required to expend or risk its own funds or otherwise 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.

Except during the continuance of an Event of Default, the Trustee undertakes to perform only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee.

**SECTION 603. Not Responsible for Recitals or Issuance of Securities.** The recitals contained herein and in the Securities, except the Trustee's certificate of authentication, and in any coupons shall be taken as the statements of the Company, and neither the Trustee nor any Authenticating Agent assumes any responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities or coupons, except that the Trustee represents that it is duly authorized to execute and deliver this Indenture, authenticate the Securities and perform its obligations hereunder. Neither the Trustee nor any Authenticating Agent shall be accountable for the use or application by the Company of Securities or the proceeds thereof. The Trustee shall have no responsibility with respect to any information, statement or recital in any offering prospectus or other disclosure materials prepared or distributed with respect to the Securities.

**SECTION 604. May Hold Securities.** The Trustee, any Paying Agent, Security Registrar, Authenticating Agent or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and coupons and, subject to TIA Sections 310(b) and 311, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Paying Agent, Security Registrar, Authenticating Agent or such other agent.

**SECTION 605. Money Held in Trust.** 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.

**SECTION 606. Compensation and Reimbursement.** The Company agrees:

(1) to pay to the Trustee as agreed upon in writing from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);

(2) except as otherwise expressly provided herein, to reimburse each of the Trustee and any predecessor Trustee upon its request for all reasonable expenses, and disbursements incurred by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the reasonable expenses and disbursements of its agents and counsel), except any such expense or disbursement as shall be determined to have been caused by its own negligence, willful misconduct or bad faith; and

(3) to indemnify each of the Trustee and any predecessor Trustee for, and to hold it harmless against, any loss, liability, claim, damage or expense incurred without negligence, willful misconduct or bad faith on its part, arising out of or in connection with the

acceptance or administration of the trust or trusts hereunder, including 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.

When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 501(6) or Section 501(7), the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to constitute expenses of administration under any applicable Federal or state bankruptcy, insolvency or other similar law.

As security for the performance of the obligations of the Company under this Section, the Trustee shall have a lien for payment of the Trustee's fees and expenses prior to the Securities upon all property and funds held or collected by the Trustee as such, except funds held in trust for the payment of principal of (or premium or Make-Whole Amount, if any) or interest on particular Securities or any coupons.

The provisions of this Section shall survive the termination of this Indenture and the resignation or removal of the Trustee.

**SECTION 607. Corporate Trustee Required; Eligibility; Conflicting Interests.** There shall at all times be a Trustee hereunder which shall be eligible to act as Trustee under TIA Section 310(a)(1) and shall have at all times a combined capital and surplus of at least \$50,000,000 (or which shall have a combined capital and surplus of at least \$10,000,000 and whose ultimate parent holding company shall have a combined capital and surplus of at least \$50,000,000). If the Trustee publishes reports of condition at least annually, pursuant to law or the requirements of Federal, state, territorial or District of Columbia supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of the Trustee 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 the Trustee shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article. Neither the Company nor any Person directly or indirectly controlling, controlled by, or under common control with the Company shall serve as Trustee.

**SECTION 608. Resignation and Removal; Appointment of Successor.**

(a) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 609.

(b) The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(c) The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of



such series delivered to the Trustee and to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(d) 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 of a Security 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 607 and shall fail to resign after written request therefor by the Company or by any Holder of a Security 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 or pursuant to a Board Resolution may remove the Trustee and appoint a successor Trustee with respect to all Securities, or (ii) subject to TIA Section 315(e), any Holder of a Security 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.

(e) If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause with respect to the Securities of one or more series, the Company, by or pursuant to a Board Resolution, shall promptly appoint a successor Trustee or Trustees 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 particular series). If, within one year after such resignation, removal or incapability, or the occurrence of such vacancy, a successor Trustee with respect to the Securities of any series shall be appointed by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders of Securities and accepted appointment in the manner hereinafter provided, any Holder of a Security who has been a bona fide Holder of a Security of such series for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to Securities of such series.

(f) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series in the manner provided for notices to the Holders of Securities in Section 106. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

**SECTION 609. Acceptance of Appointment by Successor.**

(a) In case of the appointment hereunder of a successor Trustee with respect to all Securities, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee, and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder, subject nevertheless to its claim, if any, provided for in Section 606.

(b) In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto, pursuant to Article Nine hereof, wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

49

---

(c) Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section 609, as the case may be.

(d) No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

**SECTION 610. Merger, Conversion, Consolidation or Succession to Business.** Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all of the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities or coupons shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities or coupons so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities or coupons. In case any Securities or coupons shall not have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities or coupons, in either its own name or that of its predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

**SECTION 611. Appointment of Authenticating Agent.** At any time when any of the Securities remain Outstanding, the Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon conversion or exchange, registration of transfer or partial redemption or repayment thereof, and 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. Any such appointment shall be evidenced by an instrument in writing signed by a Responsible Officer of the Trustee, a copy of which instrument shall be promptly furnished to the Company. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a bank or trust company or corporation organized and doing business and in good standing under the laws of the United States of America or of any state 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 authorities. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. In case at any time an Authenticating Agent

50

---

shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

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 Section, without the execution or filing of any paper or further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent for any series of Securities may at any time resign by giving written notice of resignation to the Trustee for such series and to the Company. The Trustee for any series of Securities may at any time terminate the agency of an Authenticating Agent by giving written notice of termination 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, the Trustee for such series may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment to all Holders of Securities of the series with respect to which such Authenticating Agent will serve in the manner set forth in Section 106. 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 herein. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Company agrees to pay to each Authenticating Agent from time to time reasonable compensation including reimbursement of its reasonable expenses for its services under this Section, subject to Section 606.

If an appointment with respect to one or more series is made pursuant to this Section, the Securities of such series may have endorsed thereon, in addition to or in lieu of the Trustee's certificate of authentication, an alternate certificate of authentication substantially in the following form:

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

[NAME OF TRUSTEE] as Trustee

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
as Authenticating Agent

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
as Authenticating Agent

**SECTION 612. Certain Duties and Responsibilities of the Trustee.**

(a) With respect to the Securities of any series, except during the continuance of an Event of Default with respect to the Securities of such series:

(1) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof 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 shall not be under any duty to verify the contents or accuracy thereof.

(b) In case an Event of Default with respect to the Securities of any series has occurred and is continuing, the Trustee shall, with respect to Securities of such series, exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(c) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(1) this Subsection shall not be construed to limit the effect of Subsection (a) of this Section;

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of a majority in principal amount of the Outstanding Securities of any series relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such series; and

(4) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise 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; and, the Trustee shall be under no obligation to exercise any of its rights and powers under this Indenture at the request of any Holder, unless such Holder shall have offered to the Trustee security and indemnity satisfactory to it against any loss, liability or expense.

(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 612.

(e) The Trustee shall not be liable for interest on any money or assets held by it except to the extent the Trustee may agree in writing with the Company. Assets held in trust by the Trustee need not be segregated from other assets except to the extent required by law.

**ARTICLE 7.**  
**HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY**

**SECTION 701. Disclosure of Names and Addresses of Holders.** Every Holder of Securities or coupons, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any Authenticating Agent nor any Paying Agent nor any Security Registrar shall be held accountable by reason of the disclosure of any information as to the names and addresses of the Holders of Securities in accordance with TIA Section 312, regardless of the source from which such information was derived, and that the Trustee shall not be held accountable by reason of mailing any material pursuant to a request made under TIA Section 312(b).

**SECTION 702. Reports by Trustee.** The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required by TIA Section 313 at the times and in the manner provided by the TIA, which shall initially be not less than every twelve months commencing on \_\_\_\_\_, 20\_\_\_\_. A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each over-the-counter market or securities exchange, if any, upon which any Securities are quoted or listed, with the Commission and with the Company. The Company will notify the Trustee when any Securities are quoted or listed on any over-the-counter market or securities exchange or delisted therefrom.

**SECTION 703. Reports by Company.** The Company will:

(1) file with the Trustee, within 15 days after the Company is required to file the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) which the Company may be required to file as an accelerated filer with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act (and if the Company's status as an accelerated filer changes, the Company shall

provide written notice of such change to the Trustee); or, if the Company is not required to file information, documents or reports pursuant to either of such Sections, then it will file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such of the supplementary and periodic information, documents and reports which may be required pursuant to Section 13 of the Exchange Act in respect of a security quoted or listed and registered on an over-the-counter market or national securities exchange as may be prescribed from time to time in such rules and regulations;

(2) file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such additional information, documents and reports with respect to compliance by the Company with the conditions and covenants of this Indenture as may be required from time to time by such rules and regulations;

(3) transmit by mail to the Holders of Securities, within 30 days after the filing thereof with the Trustee, in the manner and to the extent provided in TIA Section 313(c), such summaries of any information, documents and reports required to be filed by the Company pursuant to paragraphs (1) and (2) of this Section as may be required by rules and regulations prescribed from time to time by the Commission; and

(4) delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates).

**SECTION 704. Company to Furnish Trustee Names and Addresses of Holders.** The Company will furnish or cause to be furnished to the Trustee:

(a) semiannually, not later than 15 days after the Regular Record Date for interest for each series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Registered Securities of such series as of such Regular Record Date, or if there is no Regular Record Date for interest for such series of Securities, semiannually, upon such dates as are set forth in the Board Resolution or indenture supplemental hereto authorizing such series, and

(b) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished,

*provided, however,* that, so long as the Trustee is the Security Registrar, no such list shall be required to be furnished.

#### **ARTICLE 8. CONSOLIDATION, MERGER, SALE, LEASE OR CONVEYANCE**

**SECTION 801. Consolidations and Mergers of Company and Sales, Leases and Conveyances Permitted Subject to Certain Conditions.** The Company may consolidate

with, or sell, lease or convey all or substantially all of its assets to, or merge with or into any other corporation, provided that in any such case, (1) either the Company shall be the continuing corporation, or the successor corporation shall be a corporation organized and existing under the laws of the United States or a State thereof and such successor corporation shall expressly assume the due and punctual payment of the principal of (and premium or Make-Whole Amount, if any) and any interest on all of the Securities, according to their tenor, and the due and punctual performance and observance of all of the covenants and conditions of this Indenture to be performed by the Company by supplemental indenture, complying with Article Nine hereof, satisfactory to the Trustee, executed and delivered to the Trustee by such corporation, (2) immediately after giving effect to such transaction and treating any indebtedness which becomes an obligation of the Company or any Subsidiary as a result thereof as having been incurred by the Company or such Subsidiary at the time of such transaction, no Event of Default, and no event which, after notice or the lapse of time, or both, would become an Event of Default, shall have occurred and be continuing and (3) the Company shall have delivered to the Trustee the Officer's Certificate and Opinion of Counsel required pursuant to Section 803 below.

**SECTION 802. Rights and Duties of Successor Corporation.** In case of any such consolidation, merger, sale, lease or conveyance and upon any such assumption by the successor corporation, such successor corporation shall succeed to and be substituted for the Company, with the same effect as if it had been named herein as the party of the first part, and the predecessor corporation, except in the event of a lease, shall be relieved of any further obligation under this Indenture and the Securities. Such successor corporation thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Securities issuable hereunder which theretofore shall not have been signed by the Company and delivered to the Trustee; and, upon the order of such successor corporation, instead of the Company, and subject to all the terms, conditions and limitations in this Indenture prescribed, the Trustee shall authenticate and shall deliver any Securities which previously shall have been signed and delivered by the officers of the Company to the Trustee for authentication, and any Securities which such successor corporation thereafter shall cause to be signed and delivered to the Trustee for that purpose. All the Securities so issued shall in all respects have the same legal rank and benefit under this Indenture as the Securities theretofore or thereafter issued in accordance with the terms of this Indenture as though all of such Securities had been issued at the date of the execution hereof.

In case of any such consolidation, merger, sale, lease or conveyance, such changes in phraseology and form (but not in substance) may be made in the Securities thereafter to be issued as may be appropriate.

**SECTION 803. Officers' Certificate and Opinion of Counsel.** Any consolidation, merger, sale, lease or conveyance permitted under Section 801 is also subject to the condition that the Trustee receive an Officers' Certificate and an Opinion of Counsel to the effect that any such consolidation, merger, sale, lease or conveyance, and the assumption by any successor corporation, complies with the provisions of this Article and that all conditions precedent herein provided for relating to such transaction have been complied with.

**ARTICLE 9.**  
**SUPPLEMENTAL INDENTURES**

**SECTION 901. Supplemental Indentures Without Consent of Holders.** Without the consent of any Holders of Securities or coupons, the Company, when authorized by or pursuant to a Board Resolution, 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 of the following purposes:

- (1) to evidence the succession of another Person to the Company and the assumption by any such successor of the covenants of the Company contained herein and in the Securities; or
- (2) to add to the covenants of the Company for the benefit of the Holders of all or any series of Securities (and if such covenants are to be for the benefit of less than all series of Securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any right or power herein conferred upon the Company; or
- (3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such Events of Default are to be for the benefit of less than all series of Securities, stating that such Events of Default are expressly being included solely for the benefit of such series); provided, however, that in respect of any such additional Events of Default such supplemental indenture may provide for a particular period of grace after default (which period may be shorter or longer than that allowed in the case of other defaults) or may provide for an immediate enforcement upon such default or may limit the remedies available to the Trustee upon such default or may limit the right of the Holders of a majority in aggregate principal amount of that or those series of Securities to which such additional Events of Default apply to waive such default; or
- (4) to add to or change any of the provisions of this Indenture to provide that Bearer Securities may be registrable as to principal, to change or eliminate any restrictions on the payment of principal of or premium or Make-Whole Amount, if any, or interest on Bearer Securities, to permit Bearer Securities to be issued in exchange for Registered Securities, to permit Bearer Securities to be issued in exchange for Bearer Securities of other authorized denominations or to permit or facilitate the issuance of Securities in uncertificated form, provided that any such action shall not adversely affect the interests of the Holders of Securities of any series or any related coupons in any material respect; or
- (5) 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 Security Outstanding of any series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision; or
- (6) to secure the Securities; or
- (7) to establish the form or terms of Securities of any series and any related coupons as permitted or contemplated by Sections 201 and 301; or



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

(9) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture which shall not be inconsistent with the provisions of this Indenture, provided such provisions shall not adversely affect the interests of the Holders of Securities of any series or any related coupons in any material respect; or

(10) 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 pursuant to Sections 401, 1402 and 1403; provided that any such action shall not adversely affect the interests of the Holders of Securities of such series and any related coupons or any other series of Securities in any material respect; or

(11) to make provisions with respect to Holders' rights of conversion with respect to any series of Securities pursuant to Article Sixteen.

**SECTION 902. Supplemental Indentures with Consent of Holders.** With the consent of the Holders of not less than a majority in principal amount of all Outstanding Securities affected by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by or pursuant to a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities and any related coupons under this Indenture; provided, however, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby:

(1) change the Stated Maturity of the principal of (or premium or Make-Whole Amount, if any, on) or any installment of principal of or interest on, any Security; or reduce the principal amount thereof or the rate or amount of interest thereon, or any premium or Make-Whole Amount payable upon the redemption thereof, 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 502 or the amount thereof provable in bankruptcy pursuant to Section 504, or adversely affect any right of repayment at the option of the Holder of any Security, or change any Place of Payment where, or the currency or currencies, currency unit or units or composite currency or currencies in which, any Security or any premium or Make-Whole Amount or the interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption or repayment at the option of the Holder, on or after the Redemption Date or the Repayment Date, as the case may be), or (if Securities of such series are convertible) adversely affect the right of the Holder to convert any Security as provided in Article Sixteen; or

(2) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver with respect to such series (or compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture, or reduce the requirements of Section 1504 for quorum or voting, or

(3) modify any of the provisions of this Section, Section 513 or Section 1009, except to increase the required percentage to effect such action 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 902 and Section 1009, or the deletion of this proviso, in accordance with the requirements of Sections 609(b) and 901(8).

It shall not be necessary for any Act of Holders under this Section 902 to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof.

A supplemental indenture which changes or eliminates any covenant or other 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.

**SECTION 903. Execution of Supplemental Indentures.** In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modification thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 612) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee’s own rights, duties or immunities under this Indenture or otherwise.

**SECTION 904. Effect of Supplemental Indentures.** Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder and of any coupon appertaining thereto shall be bound thereby.

**SECTION 905. Conformity with Trust Indenture Act.** Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

**SECTION 906. Reference in Securities to Supplemental Indentures.** Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall, if required by the Trustee, bear a notation in form

approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series.

## **ARTICLE 10. COVENANTS**

**SECTION 1001. Payment of Principal, Premium or Make-Whole Amount, if any; and Interest.** The Company covenants and agrees for the benefit of the Holders of each series of Securities that it will duly and punctually pay the principal of (and premium or Make-Whole Amount, if any) and interest on the Securities of that series in accordance with the terms of such series of Securities, any coupons appertaining thereto and this Indenture. Unless otherwise specified as contemplated by Section 301 with respect to any series of Securities, any interest due on Bearer Securities on or before Maturity shall be payable only upon presentation and surrender of the several coupons for such interest installments as are evidenced thereby as they severally mature. Unless otherwise specified with respect to Securities of any series pursuant to Section 301, at the option of the Company (upon written notice to the Trustee), all payments of principal may be paid by check to the registered Holder of the Registered Security or other Person entitled thereto against surrender of such Security.

**SECTION 1002. Maintenance of Office or Agency.** If Securities of a series are issuable only as Registered Securities, the Company shall maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment or conversion, where Securities of that series may be surrendered for registration of transfer or conversion or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. If Securities of a series are issuable as Bearer Securities, the Company will maintain: (A) in the Borough of Manhattan, The City of New York, an office or agency where any Registered Securities of that series may be presented or surrendered for payment or conversion, where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange, where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served and where Bearer Securities of that series and related coupons may be presented or surrendered for payment or conversion in the circumstances described in the following paragraph (and not otherwise); (B) subject to any laws or regulations applicable thereto, in a Place of Payment for that series which is located outside the United States, an office or agency where Securities of that series and related coupons may be presented and surrendered for payment; provided, however, that if the Securities of that series are listed on any stock exchange located outside the United States and such stock exchange shall so require, the Company will maintain a Paying Agent for the Securities of that series in any required city located outside the United States, as the case may be, so long as the Securities of that series are listed on such exchange; and (C) subject to any laws or regulations applicable thereto, in a Place of Payment for that series located outside the United States an office or agency where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange and where notices and demands to or upon

the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of each 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, except that Bearer Securities of that series and the related coupons may be presented and surrendered for payment or conversion at the offices specified in the Security, in London, England, and the Company hereby appoints the same as its agent to receive such respective presentations, surrenders, notices and demands, and the Company hereby appoints the Trustee its agent to receive all such presentations, surrenders, notices and demands.

Unless otherwise specified with respect to any Securities pursuant to Section 301, no payment of principal, premium or Make-Whole Amount or interest on Bearer Securities shall be made at any office or agency of the Company in the United States or by check mailed to any address in the United States or by transfer to an account maintained with a bank located in the United States; provided, however, that, if the Securities of a series are payable in Dollars, payment of principal of and any premium or Make-Whole Amount and interest on any Bearer Security shall be made at the office of the Company's Paying Agent in the Borough of Manhattan, The City of New York, if (but only if) payment in Dollars of the full amount of such principal, premium or Make-Whole Amount, or interest, as the case may be, at all offices or agencies outside the United States maintained for the purpose by the Company in accordance with this Indenture, is illegal or effectively precluded by exchange controls or other similar restrictions.

The Company may from time to time designate one or more other offices or agencies (in or outside the Place of Payment) where the Securities of one or more series may be presented or surrendered for any or all of such purposes, and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in accordance with the requirements set forth above for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency. Unless otherwise specified with respect to any Securities pursuant to Section 301 with respect to a series of Securities, the Company hereby designates as a Place of Payment for each series of Securities, each of (i) the office or agency of the Company in the Borough of Manhattan, The City of New York, and (ii) the Corporate Trust Office of the Trustee (as Paying Agent); and the Company hereby initially appoints the Trustee at its Corporate Trust Office as Paying Agent in such city; and the Company hereby initially appoints as its agent to receive all such presentations, surrenders, notices and demands each of the Trustee, at its Corporate Trust Office.

Unless otherwise specified with respect to any Securities pursuant to Section 301, if and so long as the Securities of any series (i) are denominated in a Foreign Currency or (ii) may be payable in a Foreign Currency, or so long as it is required under any other provision of the Indenture, then the Company will maintain with respect to each such series of Securities, or as so required, at least one exchange rate agent (of which it shall give written notice to the Trustee).

60

---

**SECTION 1003. Money for Securities Payments to Be Held in Trust.** If the Company shall at any time act as its own Paying Agent with respect to any series of any Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any of the Securities of that series, segregate and hold in trust for the benefit of the Persons entitled thereto a sum in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided, and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any Securities of that series, deposit with a Paying Agent a sum (in the currency or currencies, currency unit or units or composite currency or currencies described in the preceding paragraph) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or Make-Whole Amount, if any, or interest and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

The Company will cause each Paying Agent for any series of Securities other than the Trustee 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, that such Paying Agent will

- (1) hold all sums held by it for the payment of principal of (and premium or Make-Whole Amount, if any) or interest on Securities in trust for the benefit of the Persons entitled thereto until such sums shall be paid to such Persons or otherwise disposed of as herein provided;
- (2) give the Trustee notice of any default by the Company (or any other obligor upon the Securities) in the making of any such payment of principal (and premium or Make-Whole Amount, if any) or interest on the Securities of that series; and
- (3) at any time during the continuance of any such default upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such Paying Agent.

The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, 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; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such sums.

Except as otherwise provided in the Securities of any series, and subject to applicable laws, any money deposited with the Trustee or any Paying Agent, or then held by the Company,

61

---

in trust for the payment of the principal of (and premium or Make-Whole Amount, if any) or interest on any Security of any series and remaining unclaimed for two years after such principal (and premium or Make-Whole Amount, if any) or interest has become due and payable shall be paid to the Company upon Company Request 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 principal of (and premium or Make-Whole Amount, if any) or interest on any Security, 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 an Authorized Newspaper, 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 1004. Existence.** Subject to Article Eight, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, all material rights (by articles of incorporation, by-laws and statute) and material franchises; provided, however, that the Company shall not be required to preserve any such right or franchise if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company.

**SECTION 1005. Maintenance of Properties.** The Company will cause all of its material properties used or useful in the conduct of its business or the business of any Subsidiary to be maintained and kept in good condition, repair and working order, normal wear and tear, casualty and condemnation excepted, and supplied with all necessary equipment and will cause to be made all necessary repairs, renewals, replacements, betterments and improvements thereof (and the Company may take out of service for a period of time, any of its properties that have been condemned or suffered any loss due to casualty in order to make such repairs, betterments and improvements), all as in the judgment of the Company may be necessary so that the business carried on in connection therewith may be properly and advantageously conducted at all times; provided, however, that the Company and its Subsidiaries shall not be prevented from (i) removing permanently any property that has been condemned or suffered a loss due to casualty based on the Company's reasonable judgment that such removal is in the best interest of the Company, or (ii) selling or otherwise disposing of their properties for value in the ordinary course of business.

**SECTION 1006. Insurance.** The Company will cause each of its and its Subsidiaries' insurable properties to be insured against loss or damage in an amount deemed reasonable by the Board of Directors with insurers of recognized responsibility.

**SECTION 1007. Payment of Taxes and Other Claims.** The Company will pay or discharge or cause to be paid or discharged, before the same shall become delinquent, (1) all taxes, assessments and governmental charges levied or imposed upon it or any Subsidiary or upon the income, profits or property of the Company or any Subsidiary, and (2) all lawful claims for labor, materials and supplies which, if unpaid, might by law become a lien upon the property of the Company or any Subsidiary; provided, however, that the Company shall not be required to

pay or discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings.

**SECTION 1008. Statement as to Compliance.** The Company will deliver to the Trustee, within 120 days after the end of each fiscal year, a brief certificate from the principal executive officer, principal financial officer or principal accounting officer as to his or her knowledge of the Company's compliance with all conditions and covenants under this Indenture and, in the event of any noncompliance, specifying such noncompliance and the nature and status thereof. For purposes of this Section 1008, such compliance shall be determined without regard to any period of grace or requirement of notice under this Indenture.

**SECTION 1009. Waiver of Certain Covenants.** The Company may omit in any particular instance to comply with any term, provision or condition set forth in Sections 1004 to 1008, inclusive, if before or after the time for such compliance the Holders of at least a majority in principal amount of all outstanding Securities of such series, by Act of such Holders, either waive such compliance in such instance or generally waive 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, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

## **ARTICLE 11. REDEMPTION OF SECURITIES**

**SECTION 1101. Applicability of Article.** Securities of any series which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article.

**SECTION 1102. Election to Redeem; Notice to Trustee.** The election of the Company to redeem any Securities shall be evidenced by or pursuant to a Board Resolution. In case of any redemption at the election of the Company of less than all of the Securities of any series, the Company shall, at least 45 days prior to the giving of the notice of redemption in Section 1104 (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee of such Redemption Date and of the principal amount of Securities of such series to be redeemed. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officers' Certificate evidencing compliance with such restriction.

**SECTION 1103. Selection by Trustee of Securities to Be Redeemed.** If less than all the Securities of any series issued on the same day with the same terms are to be redeemed, the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series issued on such date with the same terms not previously called for redemption, by such method as the Trustee shall deem fair and appropriate and which may provide for the selection for redemption of

portions (equal to the minimum authorized denomination for Securities of that series or any integral multiple thereof) of the principal amount of Securities of such series of a denomination larger than the minimum authorized denomination for Securities of that series.

The Trustee shall promptly notify the Company and the Security Registrar (if other than itself) in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the principal amount thereof to be redeemed.

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 which has been or is to be redeemed.

**SECTION 1104. Notice of Redemption.** Notice of redemption shall be given in the manner provided in Section 106, not less than 30 days nor more than 60 days prior to the Redemption Date, unless a shorter period is specified by the terms of such series established pursuant to Section 301, to each Holder of Securities to be redeemed, but failure to give such notice in the manner herein provided to the Holder of any Security designated for redemption as a whole or in part, or any defect in the notice to any such Holder, shall not affect the validity of the proceedings for the redemption of any other such Security or portion thereof.

Any notice that is mailed to the Holders of Registered Securities in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the Holder receives the notice.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price, accrued interest to the Redemption Date payable as provided in Section 1106, if any,
- (3) if less than all Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amount) of the particular Security or Securities to be redeemed,
- (4) in case any Security is to be redeemed in part only, the notice which relates to such Security shall state that on and after the Redemption Date, upon surrender of such Security, the holder will receive, without a charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed,
- (5) that on the Redemption Date the Redemption Price and accrued interest to the Redemption Date payable as provided in Section 1106, if any, will become due and payable upon each such Security, or the portion thereof, to be redeemed and, if applicable, that interest thereon shall cease to accrue on and after said date,
- (6) the Place or Places of Payment where such Securities, together in the case of Bearer Securities with all coupons appertaining thereto, if any, maturing after the Redemption

Date, are to be surrendered for payment of the Redemption Price and accrued interest, if any, or for conversion,

(7) that the redemption is for a sinking fund, if such is the case,

(8) that, unless otherwise specified in such notice, Bearer Securities of any series, if any, surrendered for redemption must be accompanied by all coupons maturing subsequent to the date fixed for redemption or the amount of any such missing coupon or coupons will be deducted from the Redemption Price, unless security or indemnity satisfactory to the Company, the Trustee for such series and any Paying Agent is furnished,

(9) if Bearer Securities of any series are to be redeemed and any Registered Securities of such series are not to be redeemed, and if such Bearer Securities may be exchanged for Registered Securities not subject to redemption on this Redemption Date pursuant to Section 305 or otherwise, the last date, as determined by the Company, on which such exchanges may be made, the CUSIP number of such Security, if any, and

(10) if applicable, that a Holder of Securities who desires to convert Securities for redemption must satisfy the requirements for conversion contained in such Securities, the then existing conversion price or rate, the place or places where such Securities may be surrendered for conversion, and the date and time when the option to convert shall expire.

Notice of redemption of Securities to be redeemed at the election of the Company 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.

**SECTION 1105. Deposit of Redemption Price.** On or prior to any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, which it may not do in the case of a sinking fund payment under Article Twelve, segregate and hold in trust as provided in Section 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay on the Redemption Date the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof which are to be redeemed on that date.

If any Securities called for redemption are converted, any money deposited with the Trustee or with any Paying Agent or so segregated and held in trust for the redemption of such Security shall be paid to the Company upon Company Request or, if then held by the Company, shall be discharged from such trust.

**SECTION 1106. Securities Payable on Redemption Date.** Notice of redemption having been given as aforesaid, the Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) (together with accrued interest, if any, to the Redemption Date), and from and after such



date (unless the Company shall default in the payment of the Redemption Price and accrued interest) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be redeemed, except to the extent provided below, shall be void. Upon surrender of any such Security for redemption in accordance with said notice, together with all coupons, if any, appertaining thereto maturing after the Redemption Date, such Security shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date; provided, however, that installments of interest on Bearer Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of coupons for such interest; and provided further that except as otherwise provided with respect to Securities convertible into the Company's Common Stock or Preferred Stock, installments of interest on Registered Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for redemption shall not be accompanied by all appurtenant coupons maturing after the Redemption Date, such Security may be paid after deducting from the Redemption Price an amount equal to the face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made from the Redemption Price, such Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal (and premium or Make-Whole Amount, if any) shall, until paid, bear interest from the Redemption Date at the rate borne by the Security.

**SECTION 1107. Securities Redeemed in Part.** Any Registered Security which is to be redeemed only in part (pursuant to the provisions of this Article or of Article Twelve) shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or his 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 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. If a Global Security is so surrendered, the Company shall execute and the Trustee shall authenticate and deliver to the depository, 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.

**ARTICLE 12.**  
**SINKING FUNDS**

**SECTION 1201. Applicability of Article.** The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of a series except as otherwise specified as contemplated by Section 301 for Securities of such series.

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 such Securities of any series is herein referred to as an “optional sinking fund payment.” If provided for by the terms of any Securities of any series, the cash amount of any mandatory sinking fund payment may be subject to reduction as provided in Section 1202. Each sinking fund payment shall be applied to the redemption of Securities of any series as provided for by the terms of Securities of such series.

**SECTION 1202. Satisfaction of Sinking Fund Payments with Securities.** The Company may, in satisfaction of all or any part of any mandatory sinking fund payment with respect to the Securities of a series, (1) deliver Outstanding Securities of such series (other than any previously called for redemption) together in the case of any Bearer Securities of such series with all unmatured coupons appertaining thereto and (2) apply as a credit Securities of such series which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, as provided for by the terms of such Securities, or which have otherwise been acquired by the Company; provided that such Securities so delivered or applied as a credit have not been previously so credited. Such Securities shall be received and credited for such purpose by the Trustee at the applicable 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.

**SECTION 1203. Redemption of Securities for Sinking Fund.** Not less than 60 days prior to each sinking fund payment date for Securities of any series, the Company will deliver to the Trustee an Officers’ Certificate specifying the amount of the next ensuing mandatory sinking fund payment for that series pursuant to the terms of that series, the portion thereof, if any, which is to be satisfied by payment of cash in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) and the portion thereof, if any, which is to be satisfied by delivering and crediting Securities of that series pursuant to Section 1202, and the optional amount, if any, to be added in cash to the next ensuing mandatory sinking fund payment, and will also deliver to the Trustee any Securities to be so delivered and credited. If such Officers’ Certificate shall specify an optional amount to be added in cash to the next ensuing mandatory sinking fund payment, the Company shall thereupon be obligated to pay the amount therein specified. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 1103 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 1104. Such notice having been duly given, the

redemption of such Securities shall be made upon the terms and in the manner stated in Sections 1106 and 1107.

**ARTICLE 13.**  
**REPAYMENT AT THE OPTION OF HOLDERS**

**SECTION 1301.** **Applicability of Article.** Repayment of Securities of any series before their Stated Maturity at the option of Holders thereof shall be made in accordance with the terms of such Securities, if any, and (except as otherwise specified by the terms of such series established pursuant to Section 301) in accordance with this Article.

**SECTION 1302.** **Repayment of Securities.** Securities of any series subject to repayment in whole or in part at the option of the Holders thereof will, unless otherwise provided in the terms of such Securities, be repaid at a price equal to the principal amount thereof, together with interest, if any, thereon accrued to the Repayment Date specified in or pursuant to the terms of such Securities. The Company covenants that on or prior to the Repayment Date it will 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 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (or, if so provided by the terms of the Securities of any series, a percentage of the principal) of, and (except if the Repayment Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof, as the case may be, to be repaid on such date.

**SECTION 1303.** **Exercise of Option.** Securities of any series subject to repayment at the option of the Holders thereof will contain an "Option to Elect Repayment" form on the reverse of such Securities. In order for any Security to be repaid at the option of the Holder, the Trustee must receive at the Place of Payment therefor specified in the terms of such Security (or at such other place or places of which the Company shall from time to time notify the Holders of such Securities) not earlier than 60 days nor later than 30 days prior to the Repayment Date (1) the Security so providing for such repayment together with the "Option to Elect Repayment" form on the reverse thereof duly completed by the Holder (or by the Holder's attorney duly authorized in writing) or (2) a telegram, telex, facsimile transmission or a letter from a member of a national securities exchange, or the FINRA, or a commercial bank or trust company in the United States setting forth the name of the Holder of the Security, the principal amount of the Security, the principal amount of the Security to be repaid, the CUSIP number, if any, or a description of the tenor and terms of the Security, a statement that the option to elect repayment is being exercised thereby and a guarantee that the Security to be repaid, together with the duly completed form entitled "Option to Elect Repayment" on the reverse of the Security, will be received by the Trustee not later than the fifth Business Day after the date of such telegram, telex, facsimile transmission or letter; provided, however, that such telegram, telex, facsimile transmission or letter shall only be effective if such Security and form duly completed are received by the Trustee by such fifth Business Day. If less than the entire principal amount of such Security is to be repaid in accordance with the terms of such Security, the principal amount of such Security to be repaid, in increments of the minimum denomination for Securities of such series, and the denomination or denominations of the Security or Securities to be issued to the

Holder for the portion of the principal amount of such Security surrendered that is not to be repaid, must be specified. The principal amount of any Security providing for repayment at the option of the Holder thereof may not be repaid in part if, following such repayment, the unpaid principal amount of such Security would be less than the minimum authorized denomination of Securities of the series of which such Security to be repaid is a part. Except as otherwise may be provided by the terms of any Security providing for repayment at the option of the Holder thereof, exercise of the repayment option by the Holder shall be irrevocable unless waived by the Company.

**SECTION 1304. When Securities Presented for Repayment Become Due and Payable.** If Securities of any series providing for repayment at the option of the Holders thereof shall have been surrendered as provided in this Article and as provided by or pursuant to the terms of such Securities, such Securities or the portions thereof, as the case may be, to be repaid shall become due and payable and shall be paid by the Company on the Repayment Date therein specified, and on and after such Repayment Date (unless the Company shall default in the payment of such Securities on such Repayment Date) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be repaid, except to the extent provided below, shall be void. Upon surrender of any such Security for repayment in accordance with such provisions, together with all coupons, if any, appertaining thereto maturing after the Repayment Date, the principal amount of such Security so to be repaid shall be paid by the Company, together with accrued interest, if any, to the Repayment Date; provided, however, that coupons whose Stated Maturity is on or prior to the Repayment Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified pursuant to Section 301, only upon presentation and surrender of such coupons; and provided further that, in the case of Registered Securities, installments of interest, if any, whose Stated Maturity is on or prior to the Repayment Date shall be payable (but without interest thereon, unless the Company shall default in the payment thereof) to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for repayment shall not be accompanied by all appurtenant coupons maturing after the Repayment Date, such Security may be paid after deducting from the amount payable therefor as provided in Section 1302 an amount equal to the face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made as provided in the preceding sentence, such Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If the principal amount of any Security surrendered for repayment shall not be so repaid upon surrender thereof, such principal amount (together with interest, if any, thereon accrued to such Repayment Date) shall, until paid, bear interest from the Repayment Date at the rate of

interest or Yield to Maturity (in the case of Original Issue Discount Securities) set forth in such Security.

**SECTION 1305. Securities Repaid in Part.** Upon surrender of any Registered Security which is to be repaid in part only, the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security, without service charge and at the expense of the Company, a new Registered Security or Securities of the same series, of any authorized denomination specified by the Holder, in an aggregate principal amount equal to and in exchange for the portion of the principal of such Security so surrendered which is not to be repaid.

**ARTICLE 14.**  
**DEFEASANCE AND COVENANT DEFEASANCE**

**SECTION 1401. Applicability of Article; Company's Option to Effect Defeasance or Covenant Defeasance.** If, pursuant to Section 301, provision is made for either or both of (a) Defeasance of the Securities of or within a series under Section 1402 or (b) Covenant Defeasance of the Securities of or within a series under Section 1403, then the provisions of such Section or Sections, as the case may be, together with the other provisions of this Article (with such modifications thereto as may be specified pursuant to Section 301 with respect to any Securities), shall be applicable to such Securities and any coupons appertaining thereto, and the Company may at its option by Board Resolution, at any time, with respect to such Securities and any coupons appertaining thereto, elect to have Section 1402 (if applicable) or Section 1403 (if applicable) be applied to such Outstanding Securities and any coupons appertaining thereto upon compliance with the conditions set forth below in this Article.

**SECTION 1402. Defeasance and Discharge.** Upon the Company's exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be deemed to have been discharged from its obligations with respect to such Outstanding Securities and any coupons appertaining thereto on the date the conditions set forth in Section 1404 are satisfied (hereinafter, "Defeasance"). For this purpose, such Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by such Outstanding Securities and any coupons appertaining thereto, which shall thereafter be deemed to be "Outstanding" only for the purposes of Section 1405 and the other Sections of this Indenture referred to in clauses (A) and (B) below, and to have satisfied all of its other obligations under such Securities and any coupons appertaining thereto and this Indenture insofar as such Securities and any coupons appertaining thereto are concerned (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), except for the following which shall survive until otherwise terminated or discharged hereunder: (A) the rights of Holders of such Outstanding Securities and any coupons appertaining thereto to receive, solely from the trust fund described in Section 1404 and as more fully set forth in such Section, payments in respect of the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto when such payments are due, (B) the Company's obligations with respect to such Securities under Sections 305, 306, 1002 and 1003 and to the extent provided with respect to the Securities of such series, Article 16, and the Company's obligations under Section 606 hereof (C) the rights, powers, trusts, duties and immunities of the Trustee hereunder and (D) this Article. Subject to compliance with this Article Fourteen, the Company may exercise its option under this Section

notwithstanding the prior exercise of its option under Section 1403 with respect to such Securities and any coupons appertaining thereto.

**SECTION 1403. Covenant Defeasance.** Upon the Company's exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be released from its obligations under Sections 1004 to 1008, inclusive, and, if specified pursuant to Section 301, its obligations under any other covenant contained herein or in any indenture supplemental hereto, with respect to such Outstanding Securities and any coupons appertaining thereto on and after the date the conditions set forth in Section 1404 are satisfied (hereinafter, "Covenant Defeasance"), and such Securities and any coupons appertaining thereto shall thereafter be deemed to be not "Outstanding" for the purposes of any direction, waiver, consent or declaration or Act of Holders (and the consequences of any thereof) in connection with Sections 1004 to 1008, inclusive, or such other covenant, but shall continue to be deemed "Outstanding" for all other purposes hereunder. For this purpose, such Covenant Defeasance means that, with respect to such Outstanding Securities and any coupons appertaining thereto, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such Section or such other covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such Section or such other covenant or by reason of reference in any such Section or such other covenant to any other provision herein or in any other document and such omission to comply shall not constitute a default or an Event of Default under Section 501(4) or 501(8) or otherwise, as the case may be, but, except as specified above, the remainder of this Indenture and such Securities and any coupons appertaining thereto shall be unaffected thereby.

**SECTION 1404. Conditions to Defeasance or Covenant Defeasance.** The following shall be the conditions to application of Section 1402 or Section 1403 to any Outstanding Securities of or within a series and any coupons appertaining thereto:

(a) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee satisfying the requirements of Section 607 who shall agree to comply with the provisions of this Article Fourteen applicable to it) as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefit of the Holders of such Securities and any coupons appertaining thereto, (1) an amount in such currency, currencies or currency unit in which such Securities and any coupons appertaining thereto are then specified as payable at Stated Maturity, or (2) Government Obligations applicable to such Securities and coupons appertaining thereto (determined on the basis of the currency, currencies or currency unit in which such Securities and coupons appertaining thereto are then specified as payable at Stated Maturity) which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than the due date of any payment of principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto, money in an amount, or (3) a combination thereof, in any case, in an amount, sufficient, without consideration of any reinvestment of such principal and interest, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay and discharge, and which shall be applied by the Trustee (or other qualifying trustee) to pay and discharge, (i) the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Outstanding Securities and any coupons

71

---

appertaining thereto on the Stated Maturity of such principal or installment of principal or interest and (ii) any mandatory sinking fund payments or analogous payments applicable to such Outstanding Securities and any coupons appertaining thereto on the day on which such payments are due and payable in accordance with the terms of this Indenture and of such Securities and any coupons appertaining thereto.

(b) Such Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, this Indenture or any other material agreement or instrument to which the Company is a party or by which it is bound.

(c) No Event of Default or event which with notice or lapse of time or both would become an Event of Default with respect to such Securities and any coupons appertaining thereto shall have occurred and be continuing on the date of such deposit or, insofar as Sections 501(6) and 501(7) are concerned, at any time during the period ending on the 91st day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until the expiration of such period).

(d) In the case of an election under Section 1402, the Company shall have delivered to the Trustee an Opinion of Counsel stating that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling, or (ii) since the date of execution of this Indenture, there has been a change in the applicable Federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Defeasance had not occurred.

(e) In the case of an election under Section 1403, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Covenant Defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred.

(f) The Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent to the Defeasance under Section 1402 or the Covenant Defeasance under Section 1403 (as the case may be) have been complied with and an Opinion of Counsel to the effect that either (i) as a result of a deposit pursuant to subsection (a) above and the related exercise of the Company's option under Section 1402 or Section 1403 (as the case may be), registration is not required under the Investment Company Act of 1940, as amended, by the Company, with respect to the trust funds representing such deposit or by the Trustee for such trust funds or (ii) all necessary registrations under said Act have been effected.

(g) Notwithstanding any other provisions of this Section, such Defeasance or Covenant Defeasance shall be effected in compliance with any additional or substitute terms,

72

---

conditions or limitations which may be imposed on the Company in connection therewith pursuant to Section 301.

(h) The payment of amounts payable to the Trustee pursuant to this Indenture shall be paid or provided for to the reasonable satisfaction of the Trustee.

**SECTION 1405. Deposited Money and Government Obligations to Be Held in Trust; Other Miscellaneous Provisions.** Subject to the provisions of the last paragraph of Section 1003, all money and Government Obligations (or other property as may be provided pursuant to Section 301) (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section 1405, the “Trustee”) pursuant to Section 1404 in respect of any Outstanding Securities of any series and any coupons appertaining thereto shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities and any coupons appertaining thereto and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Holders of such Securities and any coupons appertaining thereto of all sums due and to become due thereon in respect of principal (and premium or Make-Whole Amount, if any) and interest, but such money need not be segregated from other funds except to the extent required by law.

Unless otherwise specified with respect to any Security pursuant to Section 301, if, after a deposit referred to in Section 1404(a) has been made, (a) the Holder of a Security in respect of which such deposit was made is entitled to, and does, elect pursuant to Section 301 or the terms of such Security to receive payment in a currency or currency unit other than that in which the deposit pursuant to Section 1404(a) has been made in respect of such Security, or (b) a Conversion Event occurs in respect of the currency or currency unit in which the deposit pursuant to Section 1404(a) has been made, the indebtedness represented by such Security and any coupons appertaining thereto shall be deemed to have been, and will be, fully discharged and satisfied through the payment of the principal of (and premium or Make-Whole Amount, if any), and interest, if any, on such Security as the same becomes due out of the proceeds yielded by converting (from time to time as specified below in the case of any such election) the amount or other property deposited in respect of such Security into the currency or currency unit in which such Security becomes payable as a result of such election or Conversion Event based on the applicable market exchange rate for such currency or currency unit in effect on the second Business Day prior to each payment date, except, with respect to a Conversion Event, for such currency or currency unit in effect (as nearly as feasible) at the time of the Conversion Event.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the Government Obligations deposited pursuant to Section 1404 or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of such Outstanding Securities and any coupons appertaining thereto.

Anything in this Article to the contrary notwithstanding, subject to Section 606, the Trustee shall deliver or pay to the Company from time to time upon Company Request any money or Government Obligations (or other property and any proceeds therefrom) held by it as provided in Section 1404 which, in the opinion of a nationally recognized firm of independent

public accountants expressed in a written certification thereof delivered to the Trustee, are in excess of the amount thereof which would then be required to be deposited to effect a Defeasance or Covenant Defeasance, as applicable, in accordance with this Article.

**ARTICLE 15.**  
**MEETINGS OF HOLDERS OF SECURITIES**

**SECTION 1501. Purposes for Which Meetings May Be Called.** A meeting of Holders of Securities of any series may be called at any time and from time to time pursuant to this Article to make, give or take any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be made, given or taken by Holders of Securities of such series.

**SECTION 1502. Call, Notice and Place of Meetings.**

(a) The Trustee may at any time call a meeting of Holders of Securities of any series for any purpose specified in Section 1501, to be held at such time and at such place as the Trustee shall determine. Notice of every meeting of Holders of Securities of any 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 given, in the manner provided in Section 106, not less than 20 nor more than 180 days prior to the date fixed for the meeting.

(b) In case at any time the Company, pursuant to a Board Resolution, or the Holders of at least 25% in principal amount of the Outstanding Securities of any series shall have requested the Trustee to call a meeting of the Holders of Securities of such series for any purpose specified in Section 1501, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have made the first publication of the notice of such meeting within 20 days after receipt of such request or shall not thereafter proceed to cause the meeting to be held as provided herein, then the Company or the Holders of Securities of such series in the amount above specified, as the case may be, may determine the time and the place for such meeting and may call such meeting for such purposes by giving notice thereof as provided in subsection (a) of this Section.

**SECTION 1503. Persons Entitled to Vote at Meetings.** To be entitled to vote at any meeting of Holders of Securities of any series, a Person shall be (1) a Holder of one or more Outstanding Securities of such series, or (2) a Person appointed by an instrument in writing as proxy for a Holder or Holders of one or more Outstanding Securities of such series by such Holder or Holders. The only Persons who shall be entitled to be present or to speak at any meeting of Holders of Securities of any series shall be the Persons entitled to vote at such meeting and their counsel, any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

**SECTION 1504. Quorum; Action.** The Persons entitled to vote a majority in principal amount of the Outstanding Securities of a series shall constitute a quorum for a meeting of Holders of Securities of such series; provided, however, that if any action is to be taken at such meeting with respect to a consent or waiver which this Indenture expressly provides may be given by the Holders of not less than a specified percentage in principal amount of the



Outstanding Securities of a series, the Persons entitled to vote such specified percentage in principal amount of the Outstanding Securities of such series shall constitute a quorum. In the absence of a quorum within 30 minutes after 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 of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such meeting. In the absence of a quorum at the reconvening of any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than 10 days; at the reconvening of any meeting adjourned or further adjourned for lack of a quorum, the Persons entitled to vote 25% in aggregate principal amount of the then Outstanding Securities shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. Notice of the reconvening of any adjourned meeting shall be given as provided in Section 1502(a), except that such notice need be given only once not less than five days prior to the date on which the meeting is scheduled to be reconvened.

Except as limited by the proviso to Section 902, any resolution presented to a meeting or adjourned meeting duly reconvened at which a quorum is present as aforesaid may be adopted by the affirmative vote of the Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities represented at such meeting; provided, however, that, except as limited by the proviso to Section 902, any resolution with respect to any request, demand, authorization, direction, notice, consent, waiver or other action which this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage, which is less than a majority, in principal amount of the Outstanding Securities of a series may be adopted at a meeting or an adjourned meeting duly reconvened and at which a quorum is present as aforesaid by the affirmative vote of the Holders of such specified percentage in principal amount of the Outstanding Securities of that series.

Any resolution passed or decision taken at any meeting of Holders of Securities of any series duly held in accordance with this Section shall be binding on all the Holders of Securities of such series and the related coupons, whether or not present or represented at the meeting.

Notwithstanding the foregoing provisions of this Section 1504, if any action is to be taken at a meeting of Holders of Securities of any series with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage in principal amount of all Outstanding Securities affected thereby, or of the Holders of such series and one or more additional series:

(i) there shall be no minimum quorum requirement for such meeting; and

(ii) the principal amount of the Outstanding Securities of such series that vote in favor of such request, demand, authorization, direction, notice, consent, waiver or other action shall be taken into account in determining whether such request, demand, authorization, direction, notice, consent, waiver or other action has been made, given or taken under this Indenture.

**SECTION 1505. Determination of Voting Rights; Conduct and Adjournment of Meetings.**

(a) Notwithstanding any provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders of Securities of a series in regard to proof of the holding of Securities of such series 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 appropriate. Except as otherwise permitted or required by any such regulations, the holding of Securities shall be proved in the manner specified in Section 104 and the appointment of any proxy shall be proved in the manner specified in Section 104 or by having the signature of the Person executing the proxy witnessed or guaranteed by any trust company, bank or banker authorized by Section 104 to certify to the holding of Bearer Securities. Such regulations may provide that written instruments appointing proxies, regular on their face, may be presumed valid and genuine without the proof specified in Section 104 or other proof.

(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 Holders of Securities as provided in Section 1502(b), in which case the Company or the Holders of Securities of the series calling the meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting.

(c) At any meeting each Holder of a Security of such series or proxy shall be entitled to one vote for each \$1,000 principal amount of the Outstanding Securities of such series 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, except as a Holder of a Security of such series or proxy.

(d) Any meeting of Holders of Securities of any series duly called pursuant to Section 15.02 at which a quorum is present may be adjourned from time to time by Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting, and the meeting may be held as so adjourned without further notice.

**SECTION 1506. Counting Votes and Recording Action of Meetings.** The vote upon any resolution submitted to any meeting of Holders of Securities of any 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 and serial numbers of the Outstanding 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, at least in duplicate, of the proceedings of each meeting of Holders of Securities of any Series 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 fact, setting forth a copy of the notice of the meeting and showing that said notice was given as provided in Section 1502 and, if applicable, Section 1504. Each copy shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one such copy shall be delivered to the Company and another to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting. Any record so signed and verified shall be conclusive evidence of the matters therein stated.

## ARTICLE 16. CONVERSION OF SECURITIES

**SECTION 1601. Applicability of Article; Conversion Privilege and Conversion Price.** Securities of any series which are convertible shall be convertible in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article Sixteen. Subject to and upon compliance with the provisions of this Article Sixteen, at any time during the period specified in the Securities, at the option of the Holder thereof, any Security or any portion of the principal amount thereof which is \$1,000 or an integral multiple of \$1,000 may be converted at the principal amount thereof, or of such portion thereof, into fully paid and nonassessable shares (calculated as to each conversion to the nearest 1/100 of a share) of Common Stock of the Company, at the Conversion Price, determined as hereinafter provided, in effect at the time of conversion. In case a Security or portion thereof is called for redemption, such conversion right in respect of the Security or portion so called shall expire at the close of business on the Business Day immediately preceding the Redemption Date, unless the Company defaults in making the payment due upon redemption, in which case such conversion right shall terminate on the date such default is cured.

The price at which shares of Common Stock shall be delivered upon conversion (herein called the "Conversion Price") of Securities of any series shall be specified in such Securities. The Conversion Price shall be adjusted in certain instances as provided in Section 1604.

In case the Company shall, by dividend or otherwise, declare or make a distribution on its Common Stock referred to in paragraph (4) of Section 1604, the Holder of each Security, upon the conversion thereof pursuant to this Article Sixteen subsequent to the close of business on the date fixed for the determination of stockholders entitled to receive such distribution and prior to the effectiveness of the Conversion Price adjustment in respect of such distribution pursuant to paragraph (4) of Section 1604, shall be entitled to receive for each share of Common Stock into which such Security is converted, the portion of the evidence of indebtedness, shares of Capital Stock or assets so distributed applicable to one share of Common Stock; provided, however, that, at the election of the Company (whose election shall be evidenced by a Board Resolution filed with the Trustee) with respect to all Holders so converting, the Company may, in lieu of distributing to such Holder any portion of such distribution not consisting of cash or securities of the Company, pay such Holder an amount in cash equal to the fair market value thereof (as determined in good faith by the Board of Directors, whose determination shall be conclusive and described in a Board Resolution filed with the Trustee). If any conversion of a Security entitled to the benefits described in the immediately preceding sentence occurs prior to the payment date for a distribution to holders of Common Stock which the Holder of the Security so converted is entitled to receive in accordance with the immediately preceding sentence, the Company may

elect (such election to be evidenced by a Board Resolution filed with the Trustee) to distribute to such Holder a due bill for the evidences of indebtedness, shares of Capital Stock or assets to which such Holder is so entitled, provided that such due bill (i) meets any applicable requirements of the principal over-the-counter market or national securities exchange or other market on which the Common Stock is then traded, and (ii) requires payment or delivery of such evidences of indebtedness or assets no later than the date of payment or delivery thereof to holders of Common Stock receiving such distribution.

**SECTION 1602. Exercise of Conversion Privilege.** In order to exercise the conversion privilege, the Holder of any Security to be converted shall surrender such Security, duly endorsed or assigned to the Company or in blank, at any office or agency maintained by the Company pursuant to Section 1002, accompanied by written notice to the Company at such office or agency that the Holder elects to convert such Security or, if less than the entire principal amount thereof is to be converted, the portion thereof to be converted and shall comply with any additional requirements set forth in such Security. Securities surrendered for conversion during the period from the close of business on any Regular Record Date next preceding any Interest Payment Date to the opening of business on such Interest Payment Date shall (except for Securities the Maturity of which is prior to such Interest Payment Date) be accompanied by payment in funds acceptable to the Company of an amount equal to the interest payable on such Interest Payment Date on the principal amount of Securities being surrendered for conversion and such interest shall be paid on such Interest Payment Date as provided in Section 307. Except as provided in the preceding sentence, no payment or adjustment shall be made upon any conversion on account of any interest accrued on the Securities surrendered for conversion or on account of any dividends on the Common Stock issued upon conversion.

The Company's delivery to the Holder of the fixed number of shares of the Common Stock of the Company (and any cash in lieu of any fractional share of Common Stock) into which the Security is convertible shall be deemed to satisfy the Company's obligation to pay the principal amount of the Security and all accrued interest and original issue discount that has not previously been paid. The shares of Common Stock of the Company so delivered shall be treated as issued first in payment of accrued interest and original issue discount and then in payment of principal. Thus, accrued interest and original issue discount shall be treated as paid, rather than canceled, extinguished or forfeited.

Securities shall be deemed to have been converted immediately prior to the close of business on the day of surrender of such Securities for conversion in accordance with the foregoing provisions, and at such time the rights of the Holders of such Securities as Holders shall cease, and the Person or Persons entitled to receive the Common Stock issuable upon conversion shall be treated for all purposes as the record holder or holders of such Common Stock at such time. As promptly as practicable on or after the conversion date, the Company shall issue and shall deliver at such office or agency a certificate or certificates for the number of full shares of Common Stock issuable upon conversion, together with payment in lieu of any fraction of a share, as provided in Section 1603.

In the case of any Security which is converted in part only, as promptly as practicable on or after the conversion date the Company shall execute and the Trustee shall authenticate and make available for delivery to the Holder thereof (or the Depository in the case of a Global

Security), at the expense of the Company, a new Security or Securities, of authorized denominations in aggregate principal amount equal to the unconverted portion of the principal amount of such Security.

**SECTION 1603. Fractions of Shares.** No fractional shares of Common Stock shall be issued upon conversion of Securities. If more than one Security shall be surrendered for conversion at one time by the same Holder, the number of full shares of Common Stock which shall be issuable upon conversion thereof shall be computed on the basis of the aggregate principal amount of the Securities (or specified portions thereof) so surrendered. Instead of any fractional share of Common Stock which would otherwise be issuable upon conversion of any Security or Securities (or specified portions thereof), the Company shall pay a cash adjustment (rounded to the nearest cent) in respect of such fraction in an amount equal to the same fraction of the Closing Price per share of the Common Stock on the day of conversion (or, if such day is not a Trading Day, on the Trading Day immediately preceding such day).

**SECTION 1604. Adjustment of Conversion Price.** The Conversion Price shall be subject to adjustment from time to time as follows:

(1) If the Company pays or makes a dividend or other distribution (a) on its Common Stock exclusively in Common Stock or (b) on any other class of Capital Stock of the Company, which dividend or distribution includes Common Stock of the Company, the Conversion Price in effect at the opening of business on the day following the date fixed for the determination of stockholders entitled to receive such dividend or other distribution (the "Dividend Record Date") shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Dividend Record Date and the denominator shall be the sum of such number of shares and the total number of shares constituting such dividend or other distribution. Such reduction shall become effective immediately after the opening of business on the day following the date fixed for such determination. For the purposes of this paragraph (1), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock. The Company shall not pay any dividend or make any distribution on shares of Common Stock held in the treasury of the Company.

(2) Subject to paragraph (6) of this Section, if the Company pays or makes a dividend or other distribution on its Common Stock consisting exclusively of Short Term Rights (as defined below), or otherwise issues Short Term Rights to all holders of its Common Stock, the Conversion Price in effect at the opening of business on the day following the record date for the determination of holders of Common Stock entitled to receive such Short Term Rights (the "Rights Record Date") shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of shares of Common Stock of the Company which the aggregate of the offering price of the total number of shares of Common Stock so offered for subscription or purchase would purchase at such current market price and the denominator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of

shares of Common Stock so offered for subscription or purchase. Such reduction shall become effective immediately after the opening of business on the day following the Rights Record Date. For the purposes of this paragraph (2), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock of the Company. The Company shall not issue any rights, options or warrants in respect of shares of its Common Stock held in the treasury of the Company. When used in this Section 1604, the term "Short Term Rights" shall mean rights, warrants or options entitling the holders thereof (for a period commencing no earlier than the Rights Record Date and expiring not more than 45 days after the Rights Record Date) to subscribe for or purchase shares of Common Stock of the Company at a price per share less than the current market price per share (determined as provided in paragraph (7) of this Section 1604) of the Common Stock of the Company on the Rights Record Date.

(3) In case outstanding shares of Common Stock of the Company shall be subdivided into a greater number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such subdivision becomes effective shall be proportionately reduced, and, conversely, in case outstanding shares of Common Stock of the Company shall be combined into a smaller number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such combination becomes effective shall be proportionately increased, such reduction or increase, as the case may be, to become effective immediately after the opening of business on the day following the day upon which such subdivision or combination becomes effective.

(4) Subject to the last sentence of this paragraph (4) of this Section, if the Company, by dividend or otherwise, (a) distributes to all holders of its Common Stock evidences of its indebtedness, shares of any class of Capital Stock of the Company or other assets (other than cash dividends out of current or retained earnings), or (b) distributes to substantially all holders of Common Stock rights or warrants to subscribe for securities (other than Short Term Rights to which paragraph (2) of this Section 1604 applies), the Conversion Price shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the current market price per share (determined as provided in paragraph (7) of this Section 1604) of the Common Stock of the Company on the Reference Date (as defined below) less the fair market value (as determined in good faith by the Board of Directors, whose determination shall be conclusive and described in a Board Resolution filed with the Trustee), on the Reference Date, of the portion of the evidences of indebtedness and other assets so distributed or of such subscription rights or warrants applicable to one share of Common Stock (collectively, the "Market Value of the Distribution") and the denominator shall be such current market price per share of the Common Stock of the Company. Such reduction shall become effective immediately prior to the opening of business on the day (the "Reference Date") following the later of (a) the date fixed for the payment of such distribution and (b) the date 20 days after notice relating to such distribution is required to be given pursuant to Section 1606(a). If the Board of Directors determines the fair market value of any distribution for purposes of this paragraph (4) by reference to the actual or when issued trading market for any securities comprising such distribution, it must in doing so consider the prices in such market over the same period used in

computing the current market price per share pursuant to paragraph (7) of this Section 1604. In the event that, with respect to any distribution to which this paragraph (4) of Section 1604 would otherwise apply, the Market Value of the Distribution is greater than the current market price per share of the Common Stock (such distribution being referred to herein as an “Unadjusted Distribution”), then the adjustment provided by this paragraph (4) shall not be made and in lieu thereof the provisions of Section 1611 shall apply with respect to such Unadjusted Distribution.

(5) The Company may, but shall not be required to, make such reductions in the Conversion Price, in addition to those required by paragraphs (1), (2), (3), and (4) of this Section 1604, as it considers to be advisable in order that any event treated for federal income tax purposes as a dividend of stock or stock rights shall not be taxable to the recipients. In addition, the Company, from time to time, may decrease the Conversion Price by any amount and for any reason, temporarily or otherwise, including situations where the Board of Directors determines such decrease to be fair and appropriate with respect to transactions in which holders of Common Stock have the right to participate.

(6) Rights or warrants issued or distributed by the Company to all holders of its Common Stock entitling the holders thereof to subscribe for or purchase shares of Common Stock or Preferred Stock, which rights or warrants (i) are deemed to be transferred with such shares of Common Stock, (ii) are not exercisable and (iii) are also issued or distributed in respect of future issuances of Common Stock, in each case in clauses (i) through (iii) until the occurrence of a specified event or events (“Trigger Events”), shall for purposes of this Section 1604 not be deemed issued or distributed until the occurrence of the earliest Trigger Event. Each share of Common Stock issued upon conversion of Securities pursuant to this Article Sixteen shall be entitled to receive the appropriate number of Common Stock purchase rights (the “Rights”), if any, and the certificates representing the Common Stock issued upon conversion shall bear such legends, if any. Notwithstanding anything to the contrary in this Article Sixteen, there shall not be any adjustment to the Conversion Price as a result of (i) the distribution of separate certificates representing the Rights; (ii) the occurrence of certain events entitling holders of Rights to receive, upon exercise thereof, Common Stock or other securities of the Company or other securities of another corporation; or (iii) the exercise of such Rights. No adjustment in the Conversion Price need be made for rights to purchase or the sale of Common Stock pursuant to a Company plan providing for reinvestment of dividends or interest.

(7) For the purpose of any computation under paragraph (2), (4) or (5) of this Section 1604, the “current market price” per share of Common Stock of the Company on any date shall be deemed to be the average of the daily Closing Prices for the 15 consecutive Trading Days selected by the Company commencing not more than 30 Trading Days before, and ending not later than, the date in question.

(8) No adjustment in the Conversion Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Price; provided, however, that any adjustments which by reason of this paragraph (8) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Article Sixteen shall be made to the nearest cent or to the nearest one-hundredth of a share of Common Stock, as the case may be.

81

---

(9) Anything herein to the contrary notwithstanding, in the event the Company shall declare any dividend or distribution requiring an adjustment in the Conversion Price hereunder and shall, thereafter and before the payment of such dividend or distribution to stockholders, legally abandon its plan to pay such dividend or distribution, the Conversion Price then in effect hereunder, if changed to reflect such dividend or distribution, shall upon the legal abandonment of such plan be changed to the Conversion Price which would have been in effect at the time of such abandonment (after giving effect to all other adjustments not so legally abandoned pursuant to the provisions of this Article Sixteen) had such dividend or distribution never been declared.

(10) Notwithstanding any other provision of this Section 1604, no adjustment to the Conversion Price shall reduce the Conversion Price below the then par value per share of the Common Stock of the Company, and any such purported adjustment shall instead reduce the Conversion Price to such par value. Notwithstanding the foregoing sentence, the Company hereby covenants that it will from time to time take all such action as may be required to assure that the par value per share of the Common Stock is at all times equal to or less than the Conversion Price.

(11) In the event that this Article Sixteen requires adjustments to the Conversion Price under more than one of paragraphs (1), (2), (3) or (4) of this Section 1604, and the record or effective dates for the transaction giving rise to such adjustments shall occur on the same date, then such adjustments shall be made by applying (to the extent they are applicable), first, the provisions of paragraph (3) of this Section 1604, second, the provisions of paragraph (1) of this Section 1604, third, the provisions of paragraph (4) of this Section 1604 and, fourth, the provisions of paragraph (2) of this Section 1604. Anything herein to the contrary notwithstanding, no single event shall require or result in duplicative adjustments in the Conversion Price pursuant to this Section 1604. After an adjustment to the Conversion Price under this Article Sixteen, any subsequent event requiring an adjustment under this Article Sixteen shall cause an adjustment to the Conversion Price as so adjusted. If, after an adjustment, a Holder of a Security upon conversion of such Security receives shares of two or more classes of Capital Stock of the Company, the Conversion Price shall thereafter be subject to adjustment upon the occurrence of an action taken with respect to any such class of Capital Stock as is contemplated by this Article Sixteen with respect to the Common Stock in this Article Sixteen.

**SECTION 1605. Notice of Adjustments of Conversion Price.** Whenever the Conversion Price is adjusted as herein provided:

(1) the Company shall compute the adjusted Conversion Price in accordance with Section 1604 or Section 1611 and shall prepare an Officer’s Certificate setting forth the adjusted Conversion Price and showing in reasonable detail the facts upon which such adjustment is based, and such certificate shall forthwith be filed (with a copy to the Trustee) at each office or agency maintained for the purpose of conversion of any Securities pursuant to Section 1002; and

(2) a notice stating that the Conversion Price has been adjusted and setting forth the adjusted Conversion Price shall forthwith be required, and as soon as practicable after it

82

---

is required, such notice shall be mailed by the Company to all Holders at their last addresses as they shall appear in the Security Register.

**SECTION 1606. Notice of Certain Corporate Action.** In case:

- (1) the Company shall take any action that would require a Conversion Price adjustment pursuant to Section 1604 or Section 1611; or
- (2) there shall occur any reclassification of the Common Stock of the Company (other than a subdivision or combination of its outstanding shares of Common Stock), or any consolidation or merger to which the Company is a party, or the sale, transfer or lease of all or substantially all of the assets of the Company and for which approval of any stockholders of the Company is required; or
- (3) there shall occur the voluntary or involuntary dissolution, liquidation or winding up of the Company, then the Company shall cause to be filed at each office or agency maintained for the purpose of conversion of Securities pursuant to Section 1002, and shall cause to be mailed to all Holders at their last addresses as they shall appear in the Security Register, at least 10 days prior to the applicable record, effective or expiration date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of any dividend, distribution or granting of rights, warrants or options, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights, options or warrants are to be determined, or (y) the date on which such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up is expected to become effective, and, if applicable, the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up.

**SECTION 1607. Company to Reserve Common Stock.** The Company shall at all times reserve and keep available, free from preemptive rights, out of its authorized but unissued Common Stock, for the purpose of effecting the conversion of Securities, a number of shares of Common Stock for the conversion of all outstanding Securities of any series which is convertible into Common Stock.

**SECTION 1608. Taxes on Conversion.** The Company will pay any and all taxes that may be payable in respect of the issue or delivery of shares of Common Stock on conversion of Securities pursuant hereto. The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in a name other than that of the Holder of the Security or Securities to be converted, and no such issue or delivery shall be made unless and until the Person requesting such issue has paid to the Company the amount of any such tax, or has established to the satisfaction of the Company that such tax has been paid.

**SECTION 1609. Covenants as to Common Stock.** The Company covenants that all shares of Common Stock which may be issued upon conversion of Securities will upon issue be duly and validly issued, fully paid and nonassessable, free of preemptive or any similar rights,



and, except as provided in Section 1608, the Company will pay all taxes, liens and charges with respect to the issue thereof.

The Company will endeavor promptly to comply with all Federal and state securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Securities, if any, and will list or cause to have quoted such shares of Common Stock on each national securities exchange or in the over-the-counter market or such other market on which the Common Stock is then listed or quoted.

**SECTION 1610. Cancellation of Converted Securities.** All Securities delivered for conversion shall be delivered to the Trustee to be cancelled by or at the direction of the Trustee, which shall dispose of the same as provided in Section 309.

**SECTION 1611. Provisions in Case of Consolidation, Merger or Sale of Assets; Special Distributions.** If any of the following shall occur, namely: (i) any reclassification or change of outstanding shares of Common Stock issuable upon conversion of Securities (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), (ii) any consolidation or merger to which the Company is a party other than a merger in which the Company is the continuing corporation and which does not result in any reclassification of, or change (other than a change in name, or par value, or from par value to no par value, or from no par value to par value or as a result of a subdivision or combination) in, outstanding shares of Common Stock or (iii) any sale or conveyance of all or substantially all of the property or business of the Company as an entirety, then the Person formed by such consolidation or resulting from such merger or which acquires such properties or assets, as the case may be, shall as a condition precedent to such transaction execute and deliver to the Trustee a supplemental indenture providing that the Holder of each Security then outstanding shall have the right thereafter, during the period such Security shall be convertible as specified in Section 1601, to convert such Security only into the kind and amount of securities, cash and other property receivable, if any, upon such consolidation, merger, sale, transfer or lease by a holder of the number of shares of Common Stock of the Company into which such Security might have been converted immediately prior to such consolidation, merger, sale, transfer or lease; provided that the kind and amount of securities, cash and other property so receivable shall be determined on the basis of the following assumptions. The holder of Common Stock referred to in the foregoing sentence:

(1) is not (a) a Person with which the Company consolidated, (b) a Person into which the Company merged or which merged into the Company, or (c) a Person to which such sale, transfer or lease was made (any Person described in the foregoing clauses (a), (b), or (c), hereinafter referred to as a "Constituent Person"), or (d) an Affiliate of a Constituent Person; and

(2) failed to exercise his rights of election, if any, as to the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale, transfer or lease (provided that if the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale transfer or lease is not the same for each share of Common Stock of the Company in respect of which such rights of election shall not have been exercised, then for the purpose of this Section 1611 the kind and amount of securities, cash and other

property receivable upon such consolidation, merger, sale, transfer or lease shall be deemed to be the kind and amount so receivable per share by a plurality of such shares of Common Stock).

Such supplemental indenture shall provide for adjustments which, for events subsequent to the effective date of such supplemental indenture, shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article Sixteen. If, in the case of any such consolidation, merger, sale transfer or lease the stock or other securities and property (including cash) receivable thereupon by a holder of Common Stock includes shares of stock or other securities and property of a corporation other than the successor or purchasing corporation, as the case may be, in such consolidation, merger, sale, transfer or lease then such supplemental indenture shall also be executed by such other corporation and shall contain such additional provisions to protect the interests of the Holders of the Securities as the Board of Directors of the Company shall reasonably consider necessary by reason of the foregoing. The above provisions of this Section 1611 shall similarly apply to successive consolidations, mergers, sales, transfers or leases.

In the event the Company shall execute a supplemental indenture pursuant to this Section 1611, the Company shall promptly file with the Trustee an Officers' Certificate briefly stating the reasons therefor, the kind or amount of shares of stock or securities or property (including cash) receivable by Holders of the Securities upon the conversion of their Securities after any such reclassification, change, consolidation, merger, sale, transfer or lease and any adjustment to be made with respect thereto.

If the Company makes a distribution to all holders of its Common Stock that constitutes an Unadjusted Distribution pursuant to the last sentence of paragraph (4) of Section 1604, then, from and after the record date for determining the holders of Common Stock entitled to receive such distribution (the "Distribution Record Date"), a Holder of a Security who converts such Security in accordance with the provisions of this Indenture shall, upon conversion, be entitled to receive, in addition to the shares of Common Stock into which the Security is convertible, the kind and amount of evidences of indebtedness, shares of Capital Stock, or other assets or subscription rights or warrants, as the case may be, comprising the distribution that such Holder would have received if such Holder had converted the Security immediately prior to the Distribution Record Date.

**SECTION 1612. Trustee Adjustment Disclaimer; Company Determination Final.** The Trustee has no duty to determine when an adjustment under this Article Sixteen should be made, how it should be made or what it should be. The Trustee has no duty to determine whether a supplemental indenture under Section 1611 need be entered into or whether any provisions of any supplemental indenture are correct. The Trustee shall not be accountable for and makes no representation as to the validity or value of any securities or assets issued upon conversion of Securities. The Trustee shall not be responsible for the Company's failure to comply with this Article Sixteen. Any determination that the Company or the Board of Directors must make pursuant to this Article Sixteen is conclusive, absent manifest error.

**SECTION 1613. When No Adjustment Required.** Except as expressly set forth in Section 1604, no adjustment in the Conversion Price shall be made because the Company issues, in exchange for cash, property or services, shares of its Common Stock, or any securities

convertible into or exchangeable for shares of its Common Stock, or securities (including warrants, rights and options) carrying the right to subscribe for or purchase shares of its Common Stock or such convertible or exchangeable securities.

In addition, notwithstanding anything herein to the contrary, no adjustment in the Conversion Price shall be made pursuant to Section 1604 in respect of any dividend or distribution if the Holders may participate therein (on a basis to be determined in good faith by the Board of Directors) and receive the same consideration they would have received if they had converted the Securities immediately prior to the record date with respect to such dividend or distribution.

**SECTION 1614. Equivalent Adjustments.** In the event that, as a result of an adjustment made pursuant to Section 1604 above, the holder of any Security thereafter surrendered for conversion shall become entitled to receive any shares of Capital Stock of the Company other than shares of its Common Stock, thereafter the Conversion Price of such other shares so receivable upon conversion of any Securities shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to Common Stock contained in this Article Sixteen.

**SIGNATURES**

**IN WITNESS WHEREOF**, the parties hereto have caused this Indenture to be duly executed all as of the day and year first above written.

**RHYTHM PHARMACEUTICALS, INC.**

By: \_\_\_\_\_  
Name:  
Title:

**[NAME OF TRUSTEE],**  
**as Trustee**

By: \_\_\_\_\_  
Name:  
Title:

**EXHIBIT A**

**FORM OF REDEEMABLE OR NON-REDEEMABLE SENIOR SECURITY**

**[Face of Security]**

[If the Holder of this Security (as indicated below) is The Depository Trust Company (“DTC”) or a nominee of DTC, this Security is a Global Security and the following two legends apply:

Unless this Security is presented by an authorized representative of The Depository Trust Company a New York corporation (“DTC”) to the Company or its agent for registration of transfer, conversion, exchange or payment, and such Security issued is registered in the name of Cede & Co., or in such other name as requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL, inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Unless and until this Security is exchanged in whole or in part for Securities in certificated form, this Security may not be transferred except as a whole by DTC to a nominee thereof or by a nominee thereof to DTC or another nominee of DTC or by DTC or any such nominee to a successor of DTC or a nominee of such successor.]



[If the Security is not to bear interest prior to Maturity, insert — The principal of this Security shall not bear interest except in the case of a default in payment of principal upon acceleration, upon redemption or at the [Stated] Maturity Date and in such case the overdue principal of this Security shall bear interest at the rate of \_\_\_\_% per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such default in payment to the date payment of such principal has been made or duly provided for. Interest on any overdue principal shall be payable on demand. Any such interest on any overdue principal that is not so paid on demand shall bear interest at the rate of \_\_\_\_% per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such demand for payment to the date payment of such interest has been made or duly provided for, and such interest shall also be payable on demand.]

The principal of this Security payable on the Stated Maturity Date [or the principal of, premium or Make-Whole Amount, if any, and, if the Redemption Date is not an Interest Payment Date, interest on this Security payable on the Redemption Date] will be paid against presentation of this Security at the office or agency of the Company maintained for that purpose in \_\_\_\_\_, in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

Interest payable on this Security on any Interest Payment Date and on the [Stated] Maturity Date [or Redemption Date, as the case may be,] will include interest accrued from and including the next preceding Interest Payment Date in respect of which interest has been paid or duly provided for (or from and including \_\_\_\_\_, if no interest has been paid on this Security) to but excluding such Interest Payment Date or the [Stated] Maturity Date [or Redemption Date, as the case may be,] If any Interest Payment Date or the [Stated] Maturity Date or [Redemption Date] falls on a day that is not a Business Day, as defined below, principal, premium or Make-Whole Amount, if any, and/or interest payable with respect to such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be,] will be paid on the next succeeding Business Day with the same force and effect as if it were paid on the date such payment was due, and no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be,] “Business Day” means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in The City of New York are required or authorized by law, regulation or executive order to close.

[If this Security is a Global Security, insert — All payments of principal, premium or Make-Whole Amount, if any, and interest in respect of this Security will be made by the Company in immediately available funds.]

Reference is hereby made to the further provisions of this Security set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.

Unless the Certificate of Authentication hereon has been executed by the Trustee by manual signature of one of its authorized signatories, this Security shall not be entitled to any benefit under the Indenture, or be valid or obligatory for any purpose.

Dated:

**RHYTHM PHARMACEUTICALS, INC.**

By: \_\_\_\_\_  
Name:  
Title:

Attest:  
Secretary

**[Reverse of Security]**

**RHYTHM PHARMACEUTICALS, INC.**

This Security is one of a duly authorized issue of securities of the Company (herein called the "Securities"), issued and to be issued in one or more series under an Indenture, dated as of \_\_\_\_\_, 20\_\_ (herein called the "Indenture") between the Company and [Name of Trustee], as Trustee (herein called the "Trustee," which term includes any successor trustee under the Indenture with respect to the series of which this Security is a part), to which Indenture and all indentures supplemental thereto reference is hereby made for a statement of the respective rights, limitations of rights, duties and immunities thereunder of the Company, the Trustee and the Holders of the Securities, and of the terms upon which the Securities are, and are to be, authenticated and delivered. This Security is one of the duly authorized series of Securities designated on the face hereof (collectively, the "Securities"), [if applicable, insert — and the aggregate principal amount of the Securities to be issued under such series is limited to \$\_\_\_\_\_ (except for Securities authenticated and delivered upon transfer of, or in exchange for, or in lieu of other Securities).] All terms used in this Security which are defined in the Indenture shall have the meanings assigned to them in the Indenture.

If an Event of Default, as defined in the Indenture, shall occur and be continuing, the principal of the Securities of this series may be declared due and payable in the manner and with the effect provided in the Indenture.

[If applicable, insert — The Securities may not be redeemed prior to the Stated Maturity Date.]

[If applicable, insert — The Securities are subject to redemption [ (1) (If applicable, insert — on \_\_\_\_\_ in any year commencing with the year \_\_\_\_\_ and ending with the year \_\_\_\_\_ through operation of the sinking fund for this series at a Redemption Price equal to 100% of the principal amount, and (2) ] [If applicable, insert — at any time [on or after \_\_\_\_\_], as a whole or in part, at the election of the Company, at the following Redemption Prices (expressed as percentages of the principal amount):

If redeemed on or before \_\_\_\_\_, \_\_\_\_% and if redeemed during the 12-month period beginning \_\_\_\_\_ of the years indicated at the Redemption Prices indicated below.

| Year | Redemption Price | Year | Redemption Price |
|------|------------------|------|------------------|
|------|------------------|------|------------------|

and thereafter at a Redemption Price equal to \_\_\_\_% of the principal amount, together in the case of any such redemption [If applicable, insert — (whether through operation of the sinking fund or otherwise)] with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — The Securities are subject to redemption (1) on \_\_\_\_\_ in any year commencing with the year and ending with the year \_\_\_\_\_ through operation of the

sinking fund for this series at the Redemption Prices for redemption through operation of the sinking fund (expressed as percentages of the principal amount) set forth in the table below, and (2) at any time [on or after \_\_\_\_\_], as a whole or in part, at the election of the Company, at the Redemption Prices for redemption otherwise than through operation of the sinking fund (expressed as percentages of the principal amount) set forth in the table below: If redeemed during the 12-month period beginning \_\_\_\_\_ of the years indicated,

| Year | Redemption Price for<br>Redemption Through _____<br>Operation of the Sinking Fund | Redemption Otherwise Than<br>Redemption Through _____<br>Operation of the Sinking Fund |
|------|---|--|
|      |   |  |
|      |   |  |

and thereafter at a Redemption Price equal to \_\_\_\_% of the principal amount, together in the case of any such redemption (whether through operation of the sinking fund or otherwise) with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — Notwithstanding the foregoing, the Company may not, prior to \_\_\_\_\_, redeem any Securities as contemplated by [Clause (2) of] the preceding paragraph as a part of, or in anticipation of, any refunding operation by the application, directly or indirectly, of moneys borrowed having an interest cost to the Company (calculated in accordance with generally accepted financial practice) of less than \_\_\_\_% per annum.]

[If applicable, insert — The sinking fund for the Securities provides for the redemption on \_\_\_\_\_ in each year, beginning with the year \_\_\_\_ and ending with the year \_\_\_\_, of [not less than] \$ \_\_\_\_\_] [(“mandatory sinking fund”) and not more than \$ \_\_\_\_\_] aggregate principal amount of the Securities. [The Securities acquired or redeemed by the Company otherwise than through [mandatory] sinking fund payments may be credited against subsequent [mandatory] sinking fund payments otherwise required to be made in the [describe order] order in which they become due.]]

Notice of redemption will be given by mail to Holders of Securities, not less than 30 nor more than 60 days prior to the Redemption Date, all as provided in the Indenture.

In the event of redemption of this Security in part only, a new Security or Securities for the unredeemed portion hereof shall be issued in the name of the Holder hereof upon the cancellation hereof.

[If applicable, insert conversion provisions set forth in any Board Resolution or indenture supplemental to the Indenture.]

The Indenture permits, with certain exceptions as therein provided, the amendment thereof and the modification of the rights and obligations of the Company and the rights of the Holders of the Securities under the Indenture at any time by the Company and the Trustee with the consent of the Holders of not less than a majority of the aggregate principal amount of all Securities issued under the Indenture at the time Outstanding and affected thereby. The Indenture



also contains provisions permitting the Holders of not less than a majority of the aggregate principal amount of the Outstanding Securities, on behalf of the Holders of all such Securities, to waive compliance by the Company with certain provisions of the Indenture. Furthermore, provisions in the Indenture permit the Holders of not less than a majority of the aggregate principal amount, in certain instances, of the Outstanding Securities of any series to waive, on behalf of all of the Holders of Securities of such series, certain past defaults under the Indenture and their consequences. Any such consent or waiver by the Holder of this Security shall be conclusive and binding upon such Holder and upon all future Holders of this Security and other Securities issued upon the registration of transfer hereof or conversion or in exchange herefor or in lieu hereof, whether or not notation of such consent or waiver is made upon this Security.

No reference herein to the Indenture and no provision of this Security or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of (and premium or Make-Whole Amount, if any) and interest on this Security at the times, places and rate, and in the coin or currency, herein prescribed.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, the transfer of this Security is registrable in the Security Register of the Company upon surrender of this Security for registration of transfer at the office or agency of the Company in any place where the principal of (and premium or Make-Whole Amount, if any) and interest on this Security are payable, duly endorsed by, or accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed by, the Holder hereof or by his attorney duly authorized in writing, and thereupon one or more new Securities, of authorized denominations and for the same aggregate principal amount, will be issued to the designated transferee or transferees.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, this Security is exchangeable for a like aggregate principal amount of Securities of different authorized denominations but otherwise having the same terms and conditions, as requested by the Holder hereof surrendering the same.

The Securities of this series are issuable only in registered form [without coupons] in denominations of \$\_\_\_\_\_ and any integral multiple thereof.

No service charge shall be made for any such registration of transfer or conversion or exchange, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith,

Prior to due presentment of this Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name this Security is registered as the owner hereof for all purposes, whether or not this Security be overdue, and neither the Company, the Trustee nor any such agent shall be affected by notice to the contrary.

No recourse shall be had for the payment of the principal of or premium or Make-Whole Amount, if any, or the interest on this Security, or for any claim based hereon, or otherwise in respect hereof, or based on or in respect of the Indenture or any indenture supplemental thereto,

against any past, present or future stockholder, employee, officer or director, as such, of the Company or of any successor, either directly or through the Company or any successor, whether by virtue of any constitution, statute or rule of law or by the enforcement of any assessment or penalty or otherwise, all such liability being, by the acceptance hereof and as part of the consideration for the issue hereof, expressly waived and released.

The Indenture and the Securities shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed entirely in such State.

**EXHIBIT B**

**FORMS OF CERTIFICATION**

**EXHIBIT B-1**

**FORM OF CERTIFICATE TO BE GIVEN BY PERSON ENTITLED  
TO RECEIVE BEARER SECURITY OR TO OBTAIN INTEREST PAYABLE  
PRIOR TO THE EXCHANGE DATE**

**CERTIFICATE**

[Insert title or sufficient description of Securities to be delivered]

This is to certify that, as of the date hereof, and except as set forth below, the above-captioned Securities held by you for our account (i) are owned by person(s) that are not citizens or residents of the United States, domestic partnerships, domestic corporations or any estate or trust the income of which is subject to United States Federal income taxation regardless of its source ("United States person(s)"), (ii) are owned by United States person(s) that are (a) foreign branches of United States financial institutions (financial institutions, as defined in United States Treasury Regulations Section 2.165-12(c)(1) (v) are herein referred to as "financial institutions") purchasing for their own account or for resale, or (b) United States person(s) who acquired the Securities through foreign branches of United States financial institutions and who hold the Securities through such United States financial institutions on the date hereof (and in either case (a) or (b), each such United States financial institution hereby agrees, on its own behalf or through its agent, that you may advise Rhythm Pharmaceuticals, Inc. or its agent that such financial institution will comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the United States Internal Revenue Code of 1986, as amended, and the regulations thereunder), or (iii) are owned by United States or foreign financial institution(s) for purposes of resale during the restricted period (as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), and, in addition, if the owner is a United States or foreign financial institution described in clause (iii) above (whether or not also described in clause (i) or (ii)), this is to further certify that such financial institution has not acquired the Securities for purposes of resale directly or indirectly to a United States person or to a person within the United States or its possessions.

As used herein, "United States" means the United States of America (including the States and the District of Columbia); and its "possessions" include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands.

We undertake to advise you promptly by tested telex or by telecopy on or prior to the date on which you intend to submit your certification relating to the above-captioned Securities held by you for our account in accordance with your operating procedures if any applicable statement herein is not correct on such date, and in the absence of any such notification it may be assumed that this certification applies as of such date.

This certificate excepts and does not relate to [U.S.\$] of such interest in the above-captioned Securities in respect of which we are not able to certify and as to which we understand

Ex. B-1

---

an exchange for an interest in a permanent Global Security or an exchange for and delivery of definitive Securities (or, if relevant, collection of any interest) cannot be made until we do so certify.

We understand that this certificate may be required in connection with certain tax legislation in the United States. If administrative or legal proceedings are commenced or threatened in connection with which this certificate is or would be relevant, we irrevocably authorize you to produce this certificate or a copy thereof to any interested party in such proceedings.

Dated:

[To be dated no earlier than the 15th day prior to (i) the Exchange Date or (ii) the relevant Interest Payment Date occurring prior to the Exchange Date, as applicable]

[Name of Person Making Certification]

(Authorized Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Ex. B-2

---

November 9, 2018

Rhythm Pharmaceuticals, Inc.  
500 Boylston St., 11th Floor  
Boston, MA 02116

Ladies and Gentlemen:

We have acted as counsel to Rhythm Pharmaceuticals, Inc., a Delaware corporation (the “Company”), in connection with a Registration Statement on Form S-3 (the “Registration Statement”) filed by the Company with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Securities Act”). The Company has provided us with two prospectuses that form a part of the Registration Statement: (i) a base prospectus (the “Base Prospectus”), which provides that it may be supplemented in the future by one or more prospectus supplements (each, a “Prospectus Supplement”), and (ii) a sales agreement prospectus (the “ATM Agreement Prospectus”), covering the offering, issuance and sale of up to \$100,000,000 of shares of common stock, par value \$0.001 per share, of the Company (“Common Stock”) that may be issued and sold under the Sales Agreement, dated November 9, 2018, between the Company and Cowen and Company, LLC (such agreement, the “ATM Agreement”) and such shares, the “Placement Shares”).

The Registration Statement, including the Base Prospectus as supplemented from time to time by one or more Prospectus Supplements, will provide for the registration of the offer and sale by the Company of an unlimited amount of (i) shares of Common Stock issuable pursuant to the Base Prospectus (as supplemented from time to time by one or more Prospectus Supplements); (ii) shares of the Company’s preferred stock, \$0.001 par value per share (“Preferred Stock”) issuable pursuant to the Base Prospectus (as supplemented from time to time by one or more Prospectus Supplements); (iii) warrants to purchase shares of Common Stock, shares of Preferred Stock and/or Debt Securities (as supplemented from time to time by one or more Prospectus Supplements) (the “Warrants”); (iv) one or more series of senior or subordinated debt securities of the Company, which may be convertible into or exchangeable for shares of Common Stock and/or Preferred Stock (the “Debt Securities”), which may be issued pursuant to an indenture to be dated on or about the date of the first issuance of Debt Securities thereunder, by and between a trustee to be selected by the Company (the “Trustee”) and qualified to act as such under the Trust Indenture Act of 1939, as amended (the “TIA”) and the Company, in the form filed as Exhibit 4.3 or Exhibit 4.4 to the Registration Statement (each, an “Indenture”) issuable pursuant to the Base Prospectus (as supplemented from time to time by one or more Prospectus Supplements); (v) units (“Units”) comprised of shares of Common Stock, shares of Preferred Stock, warrants and other securities of the Company in any combination issuable pursuant to the Base Prospectus (as supplemented from time to time by one or more Prospectus Supplements); and (vi) the Placement Shares.

The Debt Securities, the Preferred Stock, the Common Stock, the Warrants, the Units and the Placement Shares are collectively referred to herein as the “Registered Securities.” The Registered Securities are being registered for offer and sale from time to time pursuant to Rule 415 of the Securities Act. This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K, in connection with the filing of the Registration Statement.

We have reviewed the corporate proceedings taken by the Company with respect to the registration of the Registered Securities. We have examined and relied upon originals or copies of such records, instruments, certificates, memoranda, and other documents as we have deemed necessary or advisable for purposes of this opinion and have assumed, without independent inquiry, the accuracy of those documents. In that examination, we have assumed the genuineness of all signatures, the conformity to the originals of all documents reviewed by us as copies, the authenticity and completeness of all original documents reviewed by us in original or copy form, and the legal competence of each individual executing such documents.

Our opinion is subject to the following assumptions, exceptions and qualifications:

(i) We have assumed that the issuance, sale, amount, and terms of each of the Registered Securities to be offered from time to time by the Company will be duly authorized and established by proper action of the Board

---

of Directors of the Company, and in accordance with the Amended and Restated Certificate of Incorporation of the Company, as amended from time to time, the Amended and Restated Bylaws of the Company, as amended from time to time, and applicable Delaware law, and that, at the time of each such issuance and sale of such Registered Securities, the Company will continue to be validly existing and in good standing under the laws of the State of Delaware, with the requisite corporate power and authority to issue and sell all such Registered Securities.

(ii) We have assumed that any shares of Common Stock issued by the Company pursuant to the Registration Statement, the Base Prospectus and any related Prospectus Supplement, including the ATM Agreement Prospectus, from time to time will not exceed the maximum authorized number of shares of Common Stock under the Amended and Restated Certificate of Incorporation of the Company, as the same may have been amended, minus that number of shares of Common Stock that may have been issued and are outstanding, or are reserved for issuance for other purposes, at such time.

(iii) We have assumed that any shares of Preferred Stock issued pursuant to the Registration Statement, the Base Prospectus and any related Prospectus Supplement, from time to time will not exceed the maximum authorized number of shares of Preferred Stock under the Amended and Restated Certificate of Incorporation of the Company, as the same may have been amended, minus that number of shares of Preferred Stock that may have been issued and are outstanding, or are reserved for issuance for other purposes, at such time and that an appropriate certificate of designation relating to each such series of Preferred Stock will have been duly authorized and established by proper action of the Board of Directors of the Company and filed with the Secretary of State of the State of Delaware as required under Delaware law, and in accordance with the Amended and Restated Certificate of Incorporation of the Company, as amended from time to time, the Amended and Restated Bylaws of the Company, as amended from time to time, and applicable Delaware law.

(iv) We have assumed that any Warrants issued by the Company pursuant to the Registration Statement, the Base Prospectus and any related Prospectus Supplement, from time to time, will be issued under one or more valid, binding, and enforceable warrant agreements (each a "Warrant Agreement").

(v) We have assumed that any Debt Securities issued by the Company pursuant to the Registration Statement, the Base Prospectus and any related Prospectus Supplement, from time to time, will be issued under and in conformity with a valid, binding and enforceable Indenture, which shall be delivered by the Trustee, and the Trustee will have all requisite power and authority to effect the transactions contemplated by such Indenture, and the Trustee or an authenticating agent for the trustee will duly authenticate the Debt Securities pursuant to the applicable Indenture, and the applicable Indenture will be the valid and binding obligation of the Trustee and will be enforceable against the Trustee in accordance with its terms. With respect to any applicable Indenture, we are expressing no opinion herein as to (i) the application of or compliance with any foreign, federal or state law or regulation or (ii) the power, authority or competence of any party, other than the Company.

(vi) The enforcement of any obligations of the Company may be limited by bankruptcy, insolvency, reorganization, moratorium, marshaling or other laws and rules of law affecting the enforcement generally of creditors' rights and remedies, including, without limitation, fraudulent conveyance and fraudulent transfer laws.

(vii) Our opinions are subject to the effects of general principles of equity (whether considered in a proceeding at law or in equity), including but not limited to, principles limiting the availability of specific performance or injunctive relief, and concepts of materiality and reasonableness, and the implied duty of good faith and fair dealing.

(viii) We express no opinion as to the enforceability of any particular provision of any of the Registered Securities relating to:

- (a) waivers of rights to object to jurisdiction or venue, or consents to jurisdiction or venue;
  - (b) waivers of rights to (or methods of) service of process, or rights to trial by jury, or other rights or benefits bestowed by operation of law;
  - (c) waiver of any applicable defenses, setoffs, recoupments, or counterclaims;
-

- (d) the granting of any power of attorney or of any proxy to any person;
- (e) exculpation or exoneration clauses, clauses relating to rights of indemnity or contribution, and clauses relating to releases or waivers of unmatured claims or rights;
- (f) waivers or variations of legal provisions or rights which are not capable of waiver or variation under application law; and
- (g) the imposition or collection of interest on overdue interest or providing for a penalty rate of interest or late charges on overdue or defaulted obligations, or the payment of any premium, liquidated damages, or other amount which may be held by any court to be a “penalty” or a “forfeiture.”

We express no opinion as to the effect of events occurring, circumstances arising or changes of law becoming effective or occurring, after the date hereof on the matters addressed in this opinion letter, and we assume no responsibility to inform you of additional or changed facts, or changes in law, of which we may become aware.

Subject to the limitations set forth below, we have made such examination of law as we have deemed necessary for the purposes of expressing the opinions set forth in this letter. Such opinions are limited solely to the Delaware General Corporation Law as applied by courts located in Delaware and, with respect to the applicable Indenture, the internal substantive laws of the State of New York (other than tax, usury, antitrust, insolvency, fraudulent conveyance or fraudulent transfer laws, blue sky and securities laws, as to which we express no opinion) as applied by courts located in New York without regard to choice of law. We express no opinion whatsoever as to the compliance or noncompliance by any person with antifraud or information delivery provisions of any state or federal laws, rules and regulations, and no inference regarding such compliance or noncompliance may be drawn from any opinion herein.

Based upon the foregoing, we are of the opinion that:

1. The Placement Shares, when issued and paid for in accordance with the ATM Agreement and as contemplated in the Registration Statement and in the ATM Agreement Prospectus, will be validly issued, fully paid and nonassessable.
2. The shares of Common Stock registered under the Registration Statement for offer and sale by the Company, when duly authorized and issued against the full payment specified therefor, which must have a value not less than the par value thereof, will be validly issued, fully paid and nonassessable.
3. The shares of Preferred Stock registered under the Registration Statement, when duly authorized and issued against the full payment specified therefor, which must have a value not less than the par value thereof, will be validly issued, fully paid and nonassessable.
4. The Warrants registered under the Registration Statement, when duly authorized, executed and delivered against the payment specified therefor, and pursuant to a Warrant Agreement or agreements duly authorized, executed and delivered by the Company and the holder of the Warrants, will be valid and binding obligations of the Company.
5. The Debt Securities registered under the Registration Statement, when duly authorized, executed and delivered against the payment specified therefor pursuant to an Indenture that has been qualified under the TIA and any underwriting agreement or purchase agreement duly authorized, executed and delivered by the Company and the initial purchasers of the Debt Securities, will be valid and binding obligations of the Company.

This opinion letter is given as of the date hereof, and we express no opinion as to the effect of subsequent events or changes in law occurring or becoming effective after the date hereof. We assume no obligation to update this

---

opinion letter or otherwise advise you with respect to any facts or circumstances or changes in law that may hereafter occur or come to our attention.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to this firm under the heading "Legal Matters" in the Prospectus included in the Registration Statement. In rendering this opinion and giving this consent, we do not admit that we are an "expert" within the meaning of the Securities Act.

Very truly yours,

Morgan, Lewis & Bockius LLP

---



**Consent of Independent Registered Public Accounting Firm**

We consent to the reference to our firm under the caption "Experts" in this Registration Statement (Form S-3) and related Prospectus of Rhythm Pharmaceuticals, Inc. for the registration of common stock, preferred stock, warrants, debt securities and units and to the incorporation by reference therein of our report dated March 12, 2018, except for Note 12, as to which the date is June 11, 2018, with respect to the consolidated financial statements of Rhythm Pharmaceuticals, Inc. included in Rhythm Pharmaceuticals' Current Report on Form 8-K dated November 9, 2018, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

Boston, Massachusetts  
November 9, 2018

---

QuickLinks

[Exhibit 23.1](#)

[Consent of Independent Registered Public Accounting Firm](#)