UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Lion Biotechnologies, Inc. (Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation or organization) 75-3254381 (I.R.S. Employer Identification Number)

21900 Burbank Blvd, Third Floor, Woodland Hills, California 91367 (818) 992-3126

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

Dr. Elma Hawkins Lion Biotechnologies, Inc. 21900 Burbank Boulevard, Third Floor Woodland Hills, California 91367 (818) 992-3126

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

With copies to:
Istvan Benko
Dietrick Miller
TroyGould PC
1801 Century Park East, 16th Floor
Los Angeles, California 90067
(310) 553-4441

	eximate date of commencement of proposed sale	to the public: From time to	time after the effectiv	e date of this registration	statement.		
If the	f the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, check the following box.						
If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.							
	If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.						
	If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.						
	Form is a registration statement pursuant to General mmission pursuant to Rule 462(e) under the Security			nereto that shall become e	effective upon filing with		
	If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.						
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):							
				reporting company 25			
	C	ALCULATION OF REGIS		Teporting Company 23			
	C. Title of each class of securities to be registered			Proposed maximum aggregate offering price (2)	Amount of registration fee		
Comn	Title of each class of securities to be registered non Stock, \$0.0.000041666 par value (3)	ALCULATION OF REGIS Amount to be	ETRATION FEE Proposed maximum offering price	Proposed maximum aggregate			
Comm Prefer	Title of each class of securities to be registered non Stock, \$0.0.000041666 par value (3) red Stock, \$0.001 par value (3)	ALCULATION OF REGIS Amount to be	ETRATION FEE Proposed maximum offering price	Proposed maximum aggregate			
Comm Prefer Debt S	Title of each class of securities to be registered non Stock, \$0.0.000041666 par value (3) red Stock, \$0.001 par value (3) Securities (3)	ALCULATION OF REGIS Amount to be	ETRATION FEE Proposed maximum offering price	Proposed maximum aggregate			
Comm Prefer Debt S Warra	Title of each class of securities to be registered non Stock, \$0.0.000041666 par value (3) red Stock, \$0.001 par value (3) Securities (3)	ALCULATION OF REGIS Amount to be	ETRATION FEE Proposed maximum offering price	Proposed maximum aggregate			
Comm Prefer Debt S	Title of each class of securities to be registered non Stock, \$0.0.000041666 par value (3) red Stock, \$0.001 par value (3) Securities (3)	ALCULATION OF REGIS Amount to be	ETRATION FEE Proposed maximum offering price	Proposed maximum aggregate			

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

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

Subject to Completion, Dated November 20, 2014

PROSPECTUS

\$100,000,000

LION BIOTECHNOLOGIES, INC.

Common Stock Preferred Stock Debt Securities Warrants Units

We may offer and sell from time to time, in one or more offerings and on terms that we will determine at the time of each offering, shares of common stock, shares of preferred stock, debt securities and/or warrants, either separately, together with other securities covered by this prospectus or as units consisting of two or more of the securities covered by this prospectus. The debt securities, preferred stock and warrants may be convertible into or exercisable or exchangeable for common stock, preferred stock or debt securities. The aggregate offering price of all securities sold under this prospectus will not exceed \$100,000,000.

We will provide the specific terms of each offering of securities, including the price and the type and amount of securities to be offered and sold, in a supplement to this prospectus. You should read this prospectus and the prospectus supplement carefully before you invest.

We may offer and sell these securities directly to purchasers or to or through one or more underwriters, dealers and agents, and on a continuous or delayed basis. If we sell securities to or through underwriters, dealers or agents, we will include their names and the fees, commissions and discounts that they will receive, as well as the net proceeds to us, in the prospectus supplement. This prospectus may not be used to sell our securities unless it is accompanied by the prospectus supplement. The delivery of this prospectus together with a prospectus supplement relating to the offered securities shall not constitute an offer of any other securities covered by this prospectus.

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 3 of this prospectus and in the applicable prospectus supplement for a discussion of risks that you should consider before you invest in our securities.

Our common stock is traded on the OTCQB under the symbol "LBIO." On November 19, 2014, the last reported sale price of our common stock on the OTCQB was \$5.20 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2014.

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
LION BIOTECHNOLOGIES, INC.	2
RISK FACTORS	3
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	17
USE OF PROCEEDS	17
THE SECURITIES THAT WE MAY OFFER	17
DESCRIPTION OF SECURITIES	18
DESCRIPTION OF COMMON STOCK	18
DESCRIPTION OF PREFERRED STOCK	19
DESCRIPTION OF DEBT SECURITIES	21
DESCRIPTION OF WARRANTS	30
DESCRIPTION OF UNITS	31
PLAN OF DISTRIBUTION	31
LEGAL MATTERS	33
EXPERTS	33
WHERE YOU CAN FIND ADDITIONAL INFORMATION	34
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	34

ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "SEC") utilizing a "shelf" registration process. Under the shelf registration process, we may sell any combination of the securities described in this prospectus in one or more transactions up to a total dollar amount of \$100,000,000.

The rules and regulations of the SEC allow us to omit from this prospectus certain information that is included in the registration statement. For further information about us and our securities, you should review the registration statement and the exhibits filed with the registration statement. In addition, the SEC allows us to incorporate by reference into this prospectus information in the reports and other documents that we file with the SEC, which means that we can disclose important information to you by referring you to those reports and other documents. The information incorporated by reference is considered to be part of this prospectus, and information that we later file with the SEC will automatically update and, where applicable, modify or supersede that information. You may read the registration statement (including its exhibits) and the reports and other documents that we file with the SEC at the SEC's website, www.sec.gov, or at the SEC's Public Reference Room described below under the heading "Where You Can Find More Information."

This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this shelf registration, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the additional information described under the heading "Incorporation of Certain Information by Reference." To the extent that any information in the prospectus supplement is inconsistent with the information in this prospectus, the information in the prospectus supplement will modify or supersede this prospectus.

This prospectus and the related prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the related prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus and the related prospectus supplement is accurate as of any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct as of any date subsequent to the date of the document incorporated by reference, even though this prospectus and any related prospectus supplement is delivered or securities are sold on a later date. Our business, financial condition, results of operations and prospects may have changed since those dates.

You should rely only on the information contained in this prospectus, in the related prospectus supplement and in any documents incorporated by reference into this prospectus. We have not authorized any salesperson, dealer or other person to provide you with information different from that contained in this prospectus, in the related prospectus supplement or in any documents incorporated by reference into this prospectus, and you are not entitled to rely upon any such different information.

Throughout this prospectus, the terms "Lion," "we," "us," "our," and "our company" refer to Lion Biotechnologies, Inc., a Nevada corporation.

LION BIOTECHNOLOGIES, INC.

Overview

Lion Biotechnologies, Inc. is an emerging biotechnology company focused on developing and commercializing adoptive cell therapy (ACT) using autologous tumor infiltrating lymphocytes (TILs) for the treatment of metastatic melanoma and other solid cancers. ACT utilizes the patient's own immune system (T-cells harvested from a patient) to treat cancer in that patient. TILs are types of anti-tumor T-cell that are naturally present in a patient's tumors and are collected from individual patients' tumor samples. The TILs are then activated and expanded *ex vivo* and then infused back into the patient to fight their tumor cells.

ACT using TILs was developed by Dr. Steven Rosenberg, Chief of Surgery at the National Cancer Institute (NCI) and a recognized pioneer in immuno-oncology. We have (i) acquired a worldwide, non-exclusive license for various adoptive cell therapy technologies from the National Institutes of Health (NIH), an agency of the United States Public Health Service within the Department of Health and Human Services, and (ii) entered into a Cooperative Research and Development Agreement (CRADA) with the NCI, pursuant to which we intend to support the *in vitro* development of improved methods for the generation and selection of TILs, develop approaches for large-scale production of TILs, and conduct clinical trials using these improved methods of generating TILs for the treatment of metastatic melanoma. While we are currently focusing on melanoma, our license with the NIH covers three other indications (breast cancer, ovarian cancer, and colorectal cancer). Currently, we are also in discussions with the NIH to license additional exclusive rights to a next generation T-cell technology that may have higher potency, persist over a longer period of time, require fewer cells, and have a lower manufacturing cost, as well as exclusive or non-exclusive rights to other indications. However, no assurance can be given that we will be able to license these additional rights.

TIL therapy is presently being studied under physician-sponsored INDs for the treatment of metastatic melanoma at several institutions, including the NCI, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer Center & Research Institute. Although we are sponsoring development of TILs at NCI and work closely with some of the physicians involved in developing these technologies at other institutions, to date we have not been direct sponsors of the clinical trials at these other institutions. Clinical trials in small patient populations at different institutions show that durable response rates can be observed in approximately half of metastatic melanoma patients treated with TIL therapy. Complete responses can be seen in about 10% of metastatic melanoma patients treated with TILs.

Unfortunately, manufacturing TILs is currently labor intensive, costly, and time-consuming, which has limited its widespread application. We have entered into a Manufacturing Services Agreement with Lonza Walkersville, Inc. (Lonza) pursuant to which Lonza has agreed to manufacture, package, ship and handle quality assurance and quality control of our TIL therapy. Lonza has commenced developing a commercial-scale manufacturing process for the TIL therapy. Our goal is to develop and establish a manufacturing process for the large-scale production of TILs that is in accord with current Good Manufacturing Practices (cGMP). By providing centralized manufacturing, we believe TIL therapy can be more widely available to a larger number of cancer patients.

Since 2011 we have worked with NCI to develop new systems for large scale manufacturing of TILs and to transfer the manufacturing process to Lonza for further development. In addition, the NCI, under our CRADA, is currently continuing to test TILs in metastatic melanoma patients either alone, or in combination with other therapeutic agents. This work has been supported by research payments of \$3.0 million that we have to date made to the NCI under the CRADA. We intend to supplement the research being conducted under the CRADA with research to be conducted under the auspices of Dr. Laszlo Radvanyi at our new Tampa, Florida, research facility that we are currently establishing in Tampa, Florida, near the H. Lee Moffitt Cancer Center & Research Institute on the Tampa campus of the University of South Florida, and through a clinical trial grant agreement we entered into with Moffitt Cancer Center in July 2014 to expand an ongoing Phase 1 study of TILs combined with the checkpoint inhibitor ipilimumab (Yervoy) in patients with metastatic melanoma. Our research and development facility, when fully operational later this year, is expected to employ approximately ten employees or contractors.

Our goal is to initiate a company-sponsored Phase 2 clinical trial early in 2015 to evaluate the feasibility, safety and efficacy of TILs manufactured for us by Lonza at its facilities in the treatment of metastatic melanoma patients refractory to other treatments. We expect the Phase 2 trial will take approximately 12-18 months to complete, and that it will cost at least \$5-6 million over the next two years to develop the more robust manufacturing process that is needed before we can initiate a pivotal clinical trial in 2016. Initiation of this Phase 3 clinical trial is dependent on Federal Drug Administration's (FDA) agreement with our clinical trial plans as well as validation of our manufacturing and testing processes. Since we completed a \$23.3 million private placement in November 2013 (the "Private Placement"), we believe that we have sufficient funds to reach the Phase 3 trial stage. The cost of a Phase 3 registration trial, however, is estimated to be at least \$30-35 million, and will require us to treat a large number of patients and will take at least three years to complete. Although we believe that we have sufficient capital to fund our anticipated research and development and working capital needs for at least the next 12 months, we do not have sufficient funds for the Phase 3 registration trial and, therefore, will have to raise additional capital to complete the trial.

We are a development stage company that to date has out-sourced all of its research and development activities. However, with the opening of the Tampa facility we will be conducting a significant portion of our research activities in-house, in the future. As of the date of this prospectus, we only had 14 employees. To date, we have not generated any revenues.

Company History

We filed our original Articles of Incorporation with the Secretary of State of Nevada on September 17, 2007. Until March 2010, we were an inactive company known as Freight Management Corp. On March 15, 2010, we changed our name to Genesis Biopharma, Inc. and in 2011 we commenced our current business. On September 26, 2013, we amended and restated our Articles of Incorporation to, among other things, change our name to Lion Biotechnologies, Inc., effect a 1-for-100 reverse stock split (pro-rata reduction of outstanding shares) of our common stock, increase (after the reverse stock split) the number of our authorized number of shares of common stock to 150,000,000 shares, and authorize the issuance of 50,000,000 shares of "blank check" preferred stock, \$0.001 par value per share.

Our principal executive offices are located at 21900 Burbank Boulevard, 3rd Floor, Woodland Hills, California 91367, and our telephone number at that address is (818) 992-3126. Our website is located at www.lionbio.com. Information on our website is not, and should not be considered, part of this prospectus.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks relating to ownership of our common stock described below, together with the information under "Risk Factors" in our subsequent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q and the other information incorporated by reference in this prospectus. Some of these factors relate principally to our business and the industry in which we operate. Other factors relate principally to your investment in our common stock. If any of these risks were to occur, our business, financial condition, results of operations, cash flows or prospects could be materially and adversely affected. In such case, you may lose all or part of your investment.

The risks and uncertainties described below and in our subsequent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also materially and adversely affect our business and operations.

Risks Related To Our Business

We have a history of operating losses; we expect to continue to incur losses and we may never be profitable.

As of September 30, 2014, we had an accumulated deficit of \$71,695,179. In addition, during the fiscal year ended December 31, 2013 and the nine month period ended September 30, 2014, we incurred a net loss of \$25,381,000 and \$7,168,000, respectively. Although most of the losses in 2013 were the result of charges attributed to our acquisition in July 2013 of Lion Biotechnologies, Inc., a Delaware company, to a restructuring of our indebtedness in May 2013, and to stock based compensation expenses for securities we issued to our executives and consultants, we expect to continue to generate losses until, if ever, we release our first product. We do not expect to generate any product sales or royalty revenues for at least four years. We expect to incur significant additional operating losses in the future as we expand research and development and clinical trial efforts.

Our ability to achieve long-term profitability is dependent upon obtaining regulatory approvals for our products and successfully commercializing our products alone or with third parties. However, our operations may not be profitable even if any of our products under development are successfully developed and produced and thereafter commercialized.

Even if we succeed in commercializing one or more of our product candidates, we expect to continue to incur substantial research and development and other expenditures to develop and market additional product candidates. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

We have limited experience in operating our current business, which makes it difficult to evaluate our business plan and our prospects.

Until March 2010, we were an inactive company known as Freight Management Corp. In March 2010, we acquired certain intellectual property related to a proprietary, therapeutic use of anti-CD55+ antibodies for the treatment of cancer and commenced developing biotechnology drugs based on the anti-CD55+ antibodies. However, test results from the studies performed for us as part of the anti-CD55+ antibody program failed to meet the pre-clinical development endpoints, and in 2011 we decided to terminate the development of products based on the anti-CD+55 antibodies and to enter into our current business. Our business is substantially dependent upon the NIH License Agreement, the CRADA and the manufacturing services agreement with Lonza Walkersville, Inc., all of which we entered into since mid-2011. In addition, since mid-2013 we have made substantial changes to our management team and to the membership of our Board of Directors. As a result, we have only a limited operating history in our current line of business on which a decision to invest in our company can be based. The future of our company currently is dependent upon our ability to implement our new business plan, as that business plan may be modified from time to time by our new management. While we believe that we have a sound business plan and research and development strategy, we have only a limited operating history against which we can test our plans and assumptions, and investors therefore cannot evaluate the likelihood of our success based on our prior operating history.

We face the problems, expenses, difficulties, complications and delays normally associated with a small, new biotechnology company, many of which are beyond our control. Accordingly, our prospects should be considered in light of the risks, expenses and difficulties frequently encountered in the establishment of a new business developing new technologies in an industry that characterized by a number of market entrants and intense competition. As of the date of this prospectus, we have only 14 full-time employees and limited resources. As a result, we may not possess the ability to successfully overcome many of the risks and uncertainties frequently encountered by early stage companies involved in the new and rapidly evolving field of biotechnology in general and in cancer treatment in particular. Since we are still developing our technologies, if our research and development efforts are successful, we may also face the risks associated with the shift from development to commercialization of new products based on innovative technologies. There can be no assurance that we will be successful in developing our new business.

We currently have no revenues, a limited amount of cash available, and will need to raise substantial additional capital to operate our business.

We do not expect to generate any revenues until, and if, we receive approval from the FDA and other regulatory authorities for our product candidates allowing us to sell our products. As a result of the funding we received in November 2013 from the Private Placement, we now have sufficient cash to fund our anticipated research and development and working capital needs for at least the next 12 months. However, it is expensive to develop cell therapies for the treatment of cancer, and to conduct clinical trials for such therapies. Based on our internal projections, we estimate that we will spend approximately \$8-\$10 million over the next 12 months to conduct or support additional clinical trials to support development of our products, support research and development, and for developing our manufacturing process. In addition, general and administrative expenses have significantly increased in 2014 and will continue to increase as we expand the scope of our operations. The funds we have in hand are only sufficient to partially fund our proposed research and development efforts and to fund only a portion of our anticipated clinical trial expenses. Therefore, we will need to raise significant amounts of additional capital to fund general and administrative expenses, to continue the research and development of our adoptive cell therapies, and to commercialize our adoptive cell therapies. Our ability to obtain such additional debt or equity funding will depend on a number of factors, including but not limited to the following:

- our degree of success in developing our adoptive cell therapy products;
- the rate of progress and cost of our research and development and clinical trial activities;
- the costs of preparing, filing, prosecuting, maintaining and enforcing patent claims and other intellectual property rights;
- · emergence of competing technologies and other adverse market developments; and
- the cost of developing and establishing the necessary manufacturing processes and facilities.

We have not identified the sources for the additional financing that we will require, and we do not have commitments from any third parties to provide this financing. Certain investors may be unwilling to invest in our securities since we are traded on the OTC QB market and not on a national securities exchange, particularly if there is only limited trading in our common stock on the OTC QB market at the time we seek financing. We intend to seek a national securities exchange listing for our common stock, but no assurance can be given of such listing or that the trading liquidity will improve even after such a listing. The volume and frequency of such trading has been limited and erratic to date. There is no assurance that sufficient funding through a financing will be available to us at acceptable terms or at all. These factors, and our ability to meet our obligations from current operations, and the need to raise additional capital to accomplish our objectives, create a substantial doubt about our ability to raise the additional funds we anticipate that we will need.

We may not be able to obtain additional financing on favorable terms or at all. If we are unable to raise additional funds when we need them, we may be required to delay, reduce or eliminate some or all of our development programs and some or all of our clinical trials. If we do not raise additional funds, we may be required to cease all operations and close our company, in which case our stockholders will suffer a total loss on their investment. If we do raise additional funds by issuing equity securities, further dilution to stockholders will result, and new investors could have rights superior to holders of shares issued in this offering. Any additional funding that we obtain in a financing is likely to reduce the percentage ownership of the company held by our existing security holders. The amount of this dilution may be substantially increased if the trading price of our common stock has declined at the time of any financing from its current levels.

The deviations in our proposed new products from existing products may require us to perform additional testing, which will increase the cost, and extend the time for obtaining approval.

Our TIL based therapy is based on the ACT technology that we licensed from the NIH and that is presently being studied under physician-sponsored INDs for the treatment of Stage IV metastatic melanoma in the U.S. at the National Cancer Institute, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute. The current method of treatment is very labor intensive and expensive, which has limited its widespread application. We are planning to develop new processes that we anticipate will enable more efficient manufacturing of our products. We may have difficulty demonstrating that the new produced from our new processes are identical to the existing products. The FDA may require additional clinical testing before permitting a larger clinical trial with the new processes, and also the new product may not be as efficacious in the new clinical trials. Cellular products are not considered as well characterized products because there are hundreds of markers present on these cells, and even small changes in manufacturing processes could alter the cell types. It is unclear at this time which of those markers are critical for success of these cells to combat cancer, so our ability to predict the outcomes with newer manufacturing processes is limited. The changes that we may make to the existing manufacturing process may require additional testing, which may increase costs and timelines associated with these developments.

In addition to developing a TIL based therapy on existing ACT technology, we are currently evaluating the desirability of conducting clinical trials of our products in combination with other existing drugs for the treatment of metastatic melanoma. These combination therapies will require additional testing and clinical trials will require additional FDA regulatory approval and will increase our future cost of expenses.

The future impact of the SEC's investigation "In the Matter of Galena Biopharma, Inc" (now known as "In the Matter of Certain Stock Promotions"), if any, is unknown, but any future involvement in the investigation could have a material adverse effect on us.

On April 23, 2014, we received a subpoena from the SEC that stated that the staff of the SEC is conducting an investigation in a matter titled <u>In the Matter of Galena Biopharma</u>, <u>Inc. File No. HO 12356</u> (now known as "<u>In the Matter of Certain Stock Promotions</u>"), and that the subpoena was issued to us as part of the foregoing investigation. The SEC's subpoena and accompanying letter did not indicate whether we are, or are not, under investigation. We are cooperating with the SEC and have completed the production of documents in response to the subpoena. To date, the SEC has not requested any further action from us. Nevertheless, the SEC may in the future require us to produce additional documents or other materials.

In general, the subpoena required that we give the SEC certain documents regarding, and communications between anyone at this company and certain listed persons and entities (which include investor-relations firms and persons associated with the investor-relations firms), and articles regarding us posted on certain equity research or other financial websites. Although the SEC has not publicly disclosed the goals and targets of its investigation, we believe that the SEC is investigating improper conduct by investor relations firms relative to the payment of bloggers and other authors for promotional articles written about public companies. A number of articles have been written about us that may be available on the internet and elsewhere. Investors considering an investment in the our securities should review this prospectus, the applicable supplement, and the documents that we have filed with the SEC rather than relying on internet blogs or other similar articles and publications.

We are unaware of the scope or timing of the SEC's investigation. As a result, we do not know how the SEC investigation is proceeding, when the investigation will be concluded, or if we will become involved to a greater extent than in response to the April 2014 subpoena. If we receive additional subpoenas or other requests for documents from the SEC, complying with any such future requests could distract the time and attention of our officers and directors or divert our resources away from ongoing research and development programs. Furthermore, it is possible that we currently are, or may hereafter become a target of the SEC's investigation. Any such investigation could result in significant legal expenses, the diversion of management's attention from our business, damage to our business and reputation, and could subject us to a wide range of remedies, including an SEC enforcement action.

We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. Currently, key members of our management and scientific team include Manish Singh, PhD, our Chief Executive Officer, Elma Hawkins PhD, our President and Chief Operating Officer, and Laszlo Radvanyi PhD, our Chief Scientific Officer. Dr. Singh has informed us that he will be resigning effective as of December 31, 2014. We have not yet identified the replacement for Dr. Singh. Although we expect to appoint another Chief Executive Officer before the end of the year, the impact of the loss of Dr. Singh's services is unknown. The loss of the services of any of our other executive officers, other key executives and employees, and other scientific advisors, and our inability to find suitable replacements could result in delays in product development and harm our business.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we grant our employees restricted stock and/or stock options that vest over time. The value to employees of restricted stock and stock options that vest over time may be significantly affected by movements in our stock price that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. Although we have employment agreements with our key employees, any of our employees could leave our employment at any time, with or without notice. We do not maintain "key man" insurance policies on the lives of these individuals or the lives of any of our other employees. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel. However, competition for qualified employees among companies in the biotechnology and biopharmaceutical industry is intense, and no assurance can be given that we will be able attract, hire, retain and motivate the highly skilled employees that we need. If we are unable to hire new skilled personnel, including management, our ability to properly develop our products and to implement our business plan will be adversely affected, which will result in a reduction in the value of our shares of common stock.

We are subject to extensive regulation, which can be costly, time consuming and can subject us to unanticipated delays; even if we obtain regulatory approval for some of our products, those products may still face regulatory difficulties.

All of our potential products, cell processing and manufacturing activities, are subject to comprehensive regulation by the FDA in the United States and by comparable authorities in other countries. The process of obtaining FDA and other required regulatory approvals, including foreign approvals, is expensive and often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. In addition, regulatory agencies may lack experience with our technologies and products, which may lengthen the regulatory review process, increase our development costs and delay or prevent their commercialization.

No adoptive cell therapy using tumor infiltrating lymphocytes has been approved for marketing in the U.S. by the U.S. Food and Drug Administration (FDA). Consequently, there is no precedent for the successful commercialization of products based on our technologies. In addition, we have had only limited experience in filing and pursuing applications necessary to gain regulatory approvals, which may impede our ability to obtain timely FDA approvals, if at all. We have not yet sought FDA approval for any adoptive cell therapy product. We will not be able to commercialize any of our potential products until we obtain FDA approval, and so any delay in obtaining, or inability to obtain, FDA approval would harm our business.

If we violate regulatory requirements at any stage, whether before or after marketing approval is obtained, we may be fined, forced to remove a product from the market and experience other adverse consequences including delay, which could materially harm our financial results. Additionally, we may not be able to obtain the labeling claims necessary or desirable for the promotion of our products. We may also be required to undertake post-marketing trials. In addition, if we or others identify side effects after any of our adoptive cell therapies are on the market, or if manufacturing problems occur, regulatory approval may be withdrawn and reformulation of our therapies, additional clinical trials, changes in labeling of our therapies, and additional marketing applications may be required.

It may take longer and cost more to complete our clinical trials than we project, or we may not be able to complete them at all.

For budgeting and planning purposes, we have projected the date for the commencement, continuation and completion of our various clinical trials. However, a number of factors, including scheduling conflicts with participating clinicians and clinical institutions, and difficulties in identifying and enrolling patients who meet trial eligibility criteria, may cause significant delays. We may not commence or complete clinical trials involving any of our products as projected or may not conduct them successfully.

Our goal is to file an IND application with the FDA by the end of 2014 for a Phase 2 company-sponsored clinical trial for the treatment of metastatic melanoma patients who are refractory to other treatments and to initiate that trial early in 2015 and, subject to the successful completion of the Phase 2 trial and FDA approval, to initiate a Phase 3 metastatic melanoma clinical trial in late 2016. We anticipate that we will have to treat a large number of patients at more than 10 medical institutions. However, because we have not yet obtained the FDA's approval for our proposed Phase 3 trial, the scope of that Phase 3 trial is still uncertain (including uncertainties as to whether it will be a pivotal trial, how many patients we will have to treat, and what kind of patients those will be). Depending on the FDA's requirements, the Phase 3 trial could differ substantially from our plans and could cost more, and take longer than we anticipate.

We expect to rely on medical institutions, academic institutions or clinical research organizations to conduct, supervise or monitor some or all aspects of clinical trials involving our products. We will have less control over the timing and other aspects of these clinical trials than if we conducted them entirely on our own. If we fail to commence or complete, or experience delays in, any of our planned clinical trials, our stock price and our ability to conduct our business as currently planned could be harmed.

We currently anticipate that we will have to rely on our manufacturing partner, Lonza Walkersville, Inc., to manufacture our adoptive cell therapy products for Phase 2 and Phase 3 clinical trials. If Lonza fails to commence or complete, or experiences delays in, manufacturing our adoptive cell therapy products, our planned clinical trials will be delayed, which will adversely affect our ability to conduct our business as currently planned.

We may not be able to license new TIL technology from the NIH as we plan to do, and any products that we may develop based on that new technology may not be as effective as current products and may cost more to develop than we anticipated.

We have commenced discussions with the NIH to obtain an exclusive license from the NIH for a next generation TILs technology that may significantly reduce our costs of production and could potentially increase the potency of the product. No assurance can be given that we will be successful in licensing these technologies on attractive terms, or at all. In addition, there is no guarantee that the next generation technology will have similar clinical effects in clinical trials in terms of safety and efficacy of the product. Our development of a product based on the new TIL's technology may require significant clinical development prior to any registration trials. These additional trials may be extensive and may increase timelines associated with our development of such a product.

If testing of a particular product does not yield successful results, then we will be unable to commercialize that product.

Our research and development programs are at an early stage. We must demonstrate our products' safety and efficacy in humans through extensive clinical testing. We may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of our products, including but not limited to the following:

· safety and efficacy results in various human clinical trials reported in scientific and medical literature may not be indicative of results we obtain in our clinical trials;

- · after reviewing test results, we or our collaborators may abandon projects that we might previously have believed to be promising;
- we, our collaborators or regulators may suspend or terminate clinical trials if the participating subjects or patients are being exposed to unacceptable health risks; and
- the effects our potential products have may not be the desired effects or may include undesirable side effects or other characteristics that preclude regulatory approval or limit their commercial use if approved.

Clinical testing is very expensive, can take many years, and the outcome is uncertain. Many months will elapse before we learn the results from any clinical trial using our adoptive cell therapy, and the data collected from our clinical trials may not be sufficient to support approval by the FDA of our TIL-based adoptive cell therapy using tumor infiltrating lymphocytes product candidates for the treatment of Stage IV metastatic melanoma or any other form of cancer. The clinical trials for our products under development may not be completed on schedule and the FDA may not ultimately approve any of our product candidates for commercial sale. If we fail to adequately demonstrate the safety and efficacy of any product candidate under development, we may not receive regulatory approval for those products, which would prevent us from generating revenues or achieving profitability.

Our research and development plans are to a large extent dependent upon the CRADA.

We expect to conduct a large portion of our research and development under the CRADA we entered into with the NCI. We are obligated to make quarterly payments of \$250,000 under the CRADA. However, we have limited control over the nature or timing of the NCI's clinical trials and limited visibility into their day-to-day activities, including with respect to how they are administering TIL therapy. The work under the CRADA is being conducted under Dr. Rosenberg. However, Dr. Rosenberg is engaged in other research activities that may receive higher priority than, or even compete with the research on our programs, which could delay the timing of our ability to conduct future planned clinical trials.

Although the CRADA has a five-year term, either party to the CRADA has the right to terminate the CRADA upon 60 days' notice to the other party. As a result, no assurance can be given that the NCI will not terminate the CRADA in the future and that the CRADA will, therefore, remain in effect until we complete our desired research thereunder.

Under the CRADA, we have an option to negotiate commercialization licenses from the NIH to intellectual property developed in the course of the CRADA research plan. There can be no assurance that we would be able to successfully complete such negotiations and ultimately acquire the rights to such intellectual property.

We have no experience as a company conducting clinical trials.

All of the preclinical and clinical trials relating to TIL therapy have to date been conducted by the NCI and other institutions. We plan to start a Phase 2 study for the treatment of metastatic melanoma patients refractory to other treatments early in 2015, and we plan to conduct a Phase 3 trial designed to treat metastatic melanoma with TILs therapy starting in late 2016. Although we have recruited a team that has significant experience with clinical trials, we have no experience as a company in conducting clinical trials. In part because of this lack of experience, we cannot be certain that the design of the planned clinical trials will be optimal from an efficacy or outcome perspective, or that these trials will begin or be completed on time, if at all. Large-scale trials will be require significant additional financial and management resources, and reliance on third-party clinical investigators, contract research organizations, or CROs, or consultants. Relying on third-party clinical investigators or CROs may cause us to encounter delays that are outside of our control.

We are required to pay substantial royalties under our license agreement with the NIH, and we must meet certain milestones to maintain our license rights.

Under our license agreement with the NIH for our adoptive cell therapy technologies, we are currently required to pay substantial royalties to that institution based on our revenues from sales of our products utilizing this technology, and these royalty payments could adversely affect the overall profitability for us of any products that we may seek to commercialize. In order to maintain our license rights under the NIH License agreement, we will need to meet certain specified milestones, subject to certain cure provisions, in the development of our product candidates. There is no assurance that we will be successful in meeting all of the milestones in the future on a timely basis or at all.

Because our current product candidates represent and our other future potential product candidates will represent novel approaches to the treatment of disease, there are many uncertainties regarding the development, the market acceptance, third-party reimbursement coverage and the commercial potential of our product candidates.

TIL therapy is presently being studied under physician-sponsored INDs for the treatment of metastatic melanoma at several institutions, including the NCI, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute on the Tampa campus of the University of South Florida, where our new research and development facilities are located. However, TIL therapy is not commercially available, and there is no assurance that the approaches offered by our current product candidates or any future product candidates can be commercialized or gain broad acceptance among doctors or patients or that governmental agencies or third-party medical insurers will be willing to provide reimbursement coverage for proposed product candidates. Moreover, we do not have verifiable internal marketing data regarding the potential size of the commercial market for our product candidates, nor have we obtained independent marketing surveys to verify the potential size of the commercial markets for our current product candidates or any future product candidates. Since our current product candidates and any future product candidates will represent new approaches to treating various conditions, it may be difficult, in any event, to accurately estimate the potential revenues from these product candidates. Accordingly, we may spend large amounts of money trying to obtain approval for product candidates that have an uncertain commercial market. The market for any products that we successfully develop will also depend on the cost of the product. We do not yet have sufficient information to reliably estimate what it will cost to commercially manufacture our current product candidates, and the actual cost to manufacture these products could materially and adversely affect the commercial viability of these products. If we do not successfully develop and commercialize products based upon our approach, we will not become profitable, which would materially and adversely affect the value of our business.

The market for our initial product candidates may be small.

We are initially developing a TIL therapy as a third line treatment of stage IV metastatic melanoma for patients who have failed all other currently approved treatments. The number of melanoma patients in this category is estimated to be approximately 8,000 annually. Not all of these patients can receive our TIL therapy because, among other factors, many patients have lesions that cannot be resected to collect their TILs. Our projections of both the number of people who have the cancers we are targeting, as well as the subset of people with these cancers in a position to receive third line therapy, and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Even if we obtain significant market share for this product candidate, because the potential target populations are small, we may never achieve profitability based solely on this initial product candidate without obtaining regulatory approval for additional indications, including to be used as first or second line therapy.

No assurance can be given that we will be able to develop a new, more efficient manufacturing process upon which our business plan to commercialize TIL-based products is dependent.

Pursuant to the CRADA, and in cooperation with Lonza Walkersville and potentially other manufacturers, we intend to develop improved methods for generating and selecting autologous TILs, and to develop methods for large-scale production of autologous TILs that are in accord with current Good Manufacturing Practices ("cGMP") procedures. Developing a new, scaled-up, pharmaceutical manufacturing process that can more efficiently, and in a more automated manner measure, produce and control the physical and/or chemical attributes of our products in a cGMP facility is subject to many uncertainties and difficulties. We have never manufactured our adoptive cell therapy product candidate on any scale, commercial or otherwise, nor has Lonza Walkersville, Inc., our main manufacturing provider. As a result, we cannot give any assurance that we will be able to establish a manufacturing process that can produce our products at a cost or in quantities necessary to make them commercially viable. Moreover, our third-party manufacturers will have to continually adhere to current cGMP regulations enforced by the FDA through its facilities inspection program. If the facilities of these manufacturers cannot pass a pre-approval plant inspection, the FDA premarket approval of our products will not be granted. In complying with cGMP and foreign regulatory requirements, we and any of our third-party manufacturers will be obligated to expend time, money and effort in production, record-keeping and quality control to assure that our products meet applicable specifications and other requirements. If we or any of our third-party manufacturers fail to comply with these requirements, we may be subject to regulatory action. No assurance can be given that we will be able to develop such a manufacturing process, or that our partners will thereafter be able to establish and operate such a production facility.

We currently cannot prevent other companies from licensing the same intellectual properties that we have licensed or from otherwise duplicating our business model and operations.

The intellectual properties that we are using to develop TIL-based cancer therapy products were licensed to us by the NIH under the License Agreement. However, the License Agreement is non-exclusive, and any other party could obtain a license for some or all of the licensed intellectual properties that we currently use. No assurance can be given that the NIH has not previously licensed, or that the NIH hereafter will not license to other biotechnology companies some or all of the technologies available to us under the License Agreement. In addition, since the National Cancer Institute, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute and others already use the ACT technology in therapy for the treatment of Stage IV metastatic melanoma, their methods and data are also available to third parties, who may want to enter into our line of business and compete against us. We currently do not own any exclusive rights that could be used to prevent third parties from duplicating our business plan or from otherwise directly competing against us. While technologies that may be developed for us under the CRADA are expected to provide us with the exclusive rights to those technologies, no assurance can be given that these new rights will be sufficient to prevent others from duplicating our business plan or from providing substantially similar products.

If we are unable to protect our proprietary rights, we may not be able to compete effectively or operate profitably.

Our success is dependent in part on maintaining and enforcing the patents and other proprietary rights that we have licensed and may develop, and on our ability to avoid infringing the proprietary rights of others. Patent law relating to the scope of claims in the biotechnology field in which we operate is still evolving and, consequently, patent positions in our industry may not be as strong as in other more well- established fields. Accordingly, the United States Patent and Trademark Office may not issue patents from the patent applications owned by or licensed to us. If issued, the patents may not give us an advantage over competitors with similar technology.

The issuance of a patent is not conclusive as to its validity or enforceability and it is uncertain how much protection, if any, will be given to the patents we have licensed from the NIH if either the NIH or we attempt to enforce the patents and if they are challenged in court or in other proceedings, such as oppositions, which may be brought in foreign jurisdictions to challenge the validity of a patent. A third party may challenge the validity or enforceability of a patent after its issuance by the Patent Office. It is possible that a competitor may successfully challenge our patents or that a challenge will result in limiting their coverage. Moreover, the cost of litigation to uphold the validity of patents and to prevent infringement can be substantial. If the outcome of litigation is adverse to us, third parties may be able to use our patented invention without payment to us. Moreover, it is possible that competitors may infringe our patents or successfully avoid them through design innovation. To stop these activities we may need to file a lawsuit. These lawsuits are expensive and would consume time and other resources, even if we were successful in stopping the violation of our patent rights. In addition, there is a risk that a court would decide that our patents are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of our patents were upheld, a court would refuse to stop the other party on the ground that its activities are not covered by, that is, do not infringe, our patents.

We also intend to rely on unpatented technology, trade secrets and confidential information. Therefore, others may independently develop substantially equivalent information and techniques or otherwise gain access to or disclose our technology. We may not be able to effectively protect our rights in unpatented technology, trade secrets and confidential information. We require each of our employees, consultants and advisors to execute a confidentiality agreement at the commencement of an employment or consulting relationship with us. However, these agreements may not provide effective protection of our information or, in the event of unauthorized use or disclosure, they may not provide adequate remedies.

Competition in the field of cancer therapy is intense and many of our competitors have substantially greater managerial resources than we have.

Competition in the field of cancer therapy is intense and is accentuated by the rapid pace of technological development. Research and discoveries by others may result in breakthroughs which may render our products obsolete even before they generate any revenue. There are products currently under development by others that could compete with the products that we are developing. Many of our potential competitors have substantially greater research and development capabilities and manufacturing, marketing, financial and managerial resources than we do. Our competitors may:

- develop safer or more effective immunotherapeutics and other therapeutic products;
- · reach the market more rapidly, reducing the potential sales of our products; or
- · establish superior proprietary positions.

Potential competitors in the market for treating metastatic melanoma will be companies such as Bristol-Myers Squibb, Roche/Genentech, Merck, Amgen, Pfizer, and GlaxoSmithKline, which already have products on the market or in development. Other companies, such as Novartis, Celgene, Kite Pharmaceuticals, and Adaptimmune, which are focused on T cell therapies technologies to treat cancer, may also be competitors. All of these companies, and most of our other current and potential competitors have substantially greater research and development capabilities and financial, scientific, regulatory, manufacturing, marketing, sales, human resources, and experience than we do. Many of our competitors have several therapeutic products that have already been developed, approved and successfully commercialized, or are in the process of obtaining regulatory approval for their therapeutic products in the United States and internationally.

Universities and public and private research institutions are also potential competitors. While these organizations primarily have educational objectives, they may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products. We may attempt to license these proprietary technologies, but these licenses may not be available to us on acceptable terms, if at all.

Our competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective, safer, more affordable or more easily commercialized than ours, and our competitors may obtain intellectual property protection or commercialize products sooner than we do. Developments by others may render our product candidates or our technologies obsolete making it difficult for us to generate revenues and the value of our common stock could decrease.

We anticipate that we will face increased competition in the future as new companies enter our markets and as scientific developments surrounding immunotherapy and other cancer therapies continue to accelerate. If our product candidates receive marketing approval but cannot compete effectively in the marketplace, our profitability and financial position would suffer.

We will be dependent on third party vendors to design, build, maintain and support our manufacturing and cell processing facilities and our information technology infrastructure and systems.

As a result of our strategy to out-source much of our research and development and all of our manufacturing, we rely very heavily on third parties to perform for us, or assist us with a variety of important functions, including research and development, manufacturing and clinical trials management. We also license all of our technology from others and, at this time, do not own any intellectual properties or technologies. We intend to rely upon Lonza Walkersville, Inc. or other third party contract manufacturers to produce large quantities of materials needed for clinical trials and product commercialization. Third party manufacturers may not be able to meet our needs with respect to timing, quantity or quality. If we are unable to contract for a sufficient supply of needed materials on acceptable terms, or if we should encounter delays or difficulties in our relationships with manufacturers, our clinical testing may be delayed, thereby delaying the submission of products for regulatory approval or the market introduction and subsequent sales of our products. Any such delay may lower our revenues and potential profitability.

We intend to rely heavily on third party vendors to design, build, maintain and support our information technology infrastructure and systems, and supply us with data center and bandwidth services. Any inability to design or delay in implementing such information technology infrastructure and systems that are compliant with 21 CFR §11, the FDA's guidelines on electronic records, and other regulations, or a disruption in network access or other services provided by these third party vendors, could significantly harm our business. Any financial or other difficulties our third-party vendors face may have negative effects on our business, the nature and extent of which we cannot predict. We will exercise little control over these third party vendors, which increases our vulnerability to any problems associated with the services they provide. We will need to license technology, software, and databases from third parties to facilitate certain aspects of the development of our information technology infrastructure and systems. Any errors, failures, interruptions or delays experienced in connection with these third party technologies and information services could negatively impact our business and could expose us to liabilities to third parties.

If any third party collaborator breaches or terminates its agreement with us, or fails to conduct its activities in a timely manner, the commercialization of our products under development could be slowed down or blocked completely. It is possible that our collaborators will change their strategic focus, pursue alternative technologies or develop alternative products, either on their own or in collaboration with others, as a means for developing treatments for the diseases targeted by our collaborative programs. The effectiveness of our collaborators in marketing our products will also affect our revenues and earnings.

We intend to continue to enter into additional third party collaborative agreements in the future. However, we may not be able to successfully negotiate any additional collaborative arrangements. If established, these relationships may not be scientifically or commercially successful.

The use of our technologies could potentially conflict with the rights of others.

Our potential competitors or others may have or acquire patent rights that they could enforce against us. If they do so, then we may be required to alter our products, pay licensing fees or cease activities. If our products conflict with patent rights of others, third parties could bring legal actions against us or our collaborators, licensees, suppliers or customers, claiming damages and seeking to enjoin manufacturing and marketing of the affected products. If these legal actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to manufacture or market the affected products. We may not prevail in any legal action and a required license under the patent may not be available on acceptable terms or at all.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.

The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial. Some of our competitors may be better able to sustain the costs of complex patent litigation because they have substantially greater resources. If there is litigation against us, we may not be able to continue our operations.

Should third parties file patent applications, or be issued patents claiming technology also used or claimed by us, we may be required to participate in interference proceedings in the United States Patent and Trademark Office to determine priority of invention. We may be required to participate in interference proceedings involving our issued patents and pending applications. We may be required to cease using the technology or to license rights from prevailing third parties as a result of an unfavorable outcome in an interference proceeding. A prevailing party in that case may not offer us a license on commercially acceptable terms.

We are exposed to potential product liability claims, and insurance against these claims may not be available to us at a reasonable rate in the future.

Our business exposes us to potential product liability risks, which are inherent in the testing, manufacturing, marketing and sale of pharmaceutical products. We do not have clinical trial insurance coverage, but we intend to obtain such liability coverage in the future. However, such insurance coverage may not be available to us at an acceptable cost, if at all. We may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise. Regardless of merit or eventual outcome, liability claims may result in decreased demand for a product, injury to our reputation, withdrawal of clinical trial volunteers and loss of revenues. Thus, whether or not we are insured, a liability claim or product recall may result in losses that could be material.

Risks Related to Our Securities

Because our stock is quoted on the OTC QB market, our stock trading volume fluctuates and often trades at low volumes, so you may be unable to sell your shares at or near the quoted bid prices if you need to sell your shares.

The shares of our common stock are traded on the OTC QB market. Shares on the OTC QB typically trade at lower volumes than on Nasdaq or on an exchange, meaning that the number of persons interested in purchasing our common shares at or near bid prices at any given time may be relatively small. In addition, the smaller number of persons interested in investing in our stock may be attributable to a number of other factors, including the fact that we are a small early stage company which is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community who can generate or influence sales volume, and that even if we came to the attention of such institutionally oriented persons, they tend to be risk-averse in this environment and would be reluctant to follow an early stage company such as ours or purchase or recommend the purchase of our shares until such time as we became more seasoned and viable. As a consequence, there may be periods when trading activity in our shares is small as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give you any assurance that a broader or more active public trading market for our common shares will develop or be sustained. The limited liquidity in our shares, the OTC QB quotation, the limited analyst coverage and other factors may have an adverse impact on the trading price of our stock. Due to these conditions, we can give you no assurance that you will be able to sell your shares at or near bid prices or at all if you need money or otherwise desire to liquidate your shares. As a result, investors could lose all or part of their investment.

You may have difficulty selling our shares because they may be deemed to be "penny stocks."

Our common stock may be deemed a "penny stock" (as that term is defined under Rule 3a51-1 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) in the future. Generally, a "penny stock" is a common stock that is not listed on a securities exchange and trades for less than \$5.00 a share. Prices often are not available to buyers and sellers and the market may be very limited. Penny stocks in start-up companies are among the riskiest equity investments. Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the SEC. The document provides information about penny stocks and the nature and level of risks involved in investing in the penny stock market. A broker must also provide purchasers with bid and offer quotations and information regarding broker and salesperson compensation and make a written determination that the penny stock is a suitable investment for the purchaser and obtain the purchaser's written agreement to the purchase. Many brokers choose not to participate in penny stock transactions. Because of the penny stock rules, there may be less trading activity in penny stocks in any market that develops for our common stock in the future and stockholders are likely to have difficulty selling their shares

Our existing directors and executive officers hold a substantial amount of our common stock and may be able to prevent other stockholders from influencing significant corporate decisions.

As of November 19, 2014, our officers and directors beneficially owned approximately 34% of our outstanding common stock. These stockholders, if they act together, may be able to direct, or materially affect the outcome of matters presented to our stockholders, including the election of our directors and other corporate actions such as:

- our merger with or into another company;
- a sale of substantially all of our assets; and
- amendments to our articles of incorporation.

The decisions of these stockholders may conflict with our interests or those of our other stockholders.

The market price of our stock may be adversely affected by market volatility.

The market price of our common stock is likely to be volatile and could fluctuate widely in response to many factors, including:

- announcements of the results of clinical trials by us or our competitors;
- developments with respect to patents or proprietary rights;
- announcements of technological innovations by us or our competitors;
- announcements of new products or new contracts by us or our competitors;
- actual or anticipated variations in our operating results due to the level of development expenses and other factors;
- changes in financial estimates by securities analysts and whether our earnings meet or exceed such estimates;
- · conditions and trends in the pharmaceutical and other industries;

- general economic, political and market conditions and other factors; and
- the occurrence of any of the risks described in this prospectus.

You may experience future dilution as a result of future equity offerings or other equity issuances.

We will have to raise substantial amounts of additional capital in the future. To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

Future sales of our common stock may depress our stock price.

As of November 19, 2014, we had approximately 27,639,688 shares of our common stock outstanding. In addition, the number of registered shares will increase by an additional 14,019,426 shares if all of the remaining shares of Series A Preferred are converted into shares of our common stock and all of the remaining warrants issued in the Private Placement are exercised for the purchase of additional shares of our common stock. During the past year, however, the average daily trading volume of our shares has fluctuated significantly, and there have been days in which the number of shares that were traded was very small. The sudden release of all of these additional freely trading shares onto the market would, most likely, have an adverse effect on the trading price of our stock. No prediction can be made as to the effect, if any, that sales of the shares included in this prospectus or the shares subject to Rule 144 sales will have on the market prices prevailing from time to time. Nevertheless, the possibility that substantial amounts of common stock may be sold in the public market may adversely affect prevailing market prices for our common stock and could impair our ability to raise capital through the sale of our equity securities

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results. As a result, we could become subject to sanctions or investigations by regulatory authorities and/or stockholder litigation, which could harm our business and have an adverse effect on our stock price.

As a public reporting company, we are subject to various regulatory requirements, including the Sarbanes-Oxley Act of 2002, which requires our management to assess and report on our internal controls over financial reporting. As a small company with few employees, we may not have sufficient personnel to properly conduct all of internal control procedures and activities that require segregation of powers and responsibilities. While we are attempting to remedy this possible internal control weakness, we may not be able to fully comply with the internal control requirements of the Sarbanes-Oxley Act of 2002, and future material weaknesses in our internal controls may arise. Material weaknesses in our internal controls could result in a loss of investor confidence in our financial reports, have an adverse effect on our stock price, and subject us to sanctions or investigation by regulatory authorities or stockholder litigation.

Our board of directors could issue additional series of preferred stock without stockholder approval with the effect of diluting existing stockholders and impairing their voting rights.

Our articles of incorporation authorize the issuance of up to 50,000,000 shares of "blank check" preferred stock (of which only 17,000 have been designated as the Series A Preferred) with designations, rights and preferences as may be determined from time to time by our board of directors. Our board is empowered, without stockholder approval, to issue one or more series of preferred stock with dividend, liquidation, conversion, voting or other rights which could dilute the interest of, or impair the voting power of, our common stockholders. The issuance of a series of preferred stock could be used as a method of discouraging, delaying or preventing a change in control. For example, it would be possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to effect a change in control of our company.

We do not anticipate paying cash dividends for the foreseeable future, and therefore investors should not buy our stock if they wish to receive cash dividends.

We have never declared or paid any cash dividends or distributions on our common stock. We currently intend to retain any future earnings to support operations and to finance expansion and, therefore, we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain forward-looking statements, and we anticipate that the related prospectus supplement will contain forward-looking statements. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results to be materially different from any future results expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by the use of words such as "believe," "anticipate," "intend," "plan," "estimate," "may," "could," "anticipate," "predict," or "expect" and similar expressions. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors that are, in many cases, beyond our control. Forward-looking statements are not guarantees of future performance. Actual events or results may differ materially from those discussed in the forward-looking statements as a result of various factors. Except as required by applicable law, we do not undertake any obligation to publicly update any forward-looking statements, whether as a result of new information, future developments or otherwise.

We will discuss certain of these risks and uncertainties in greater detail in any prospectus supplement under the heading "Risk Factors." Additional cautionary statements or discussions of risks and uncertainties that could affect our results or the achievement of the expectations described in forward-looking statements may also be contained in the documents we incorporate by reference into this prospectus, including our most recent Annual Report on Form 10-K filed with the SEC and our Quarterly Reports on Form 10-Q filed subsequently with the SEC.

USE OF PROCEEDS

Unless we state otherwise in the applicable prospectus supplement, we intend to use the net proceeds from the sale of securities described in this prospectus for the further development of our products and for general corporate purposes, which may include, among other things, reducing indebtedness, acquiring other businesses (although we currently have no agreement to acquire any business), repurchasing our common stock and making capital expenditures, as well as for working capital. Until we use the net proceeds for these purposes, we intend to invest the net proceeds in investment-grade, interest-bearing securities. We have not determined the amounts we plan to spend on any of these areas or the timing of these expenditures. As a result, our management will have broad discretion regarding the application of the net proceeds from the sale of securities described in this prospectus.

THE SECURITIES THAT WE MAY OFFER

We, directly or through underwriters, dealers or agents designated by us from time to time, may offer, issue and sell, together or separately, up to \$100,000,000 in the aggregate of:

- · shares of our common stock, par value \$0.000041666 per share;
- · shares of our preferred stock, par value \$0.001 per share;
- debt securities;

- · warrants to purchase shares of our common stock, shares of our preferred stock and/or our debt securities; and
- · units consisting of two or more of the securities described above.

The common stock, the preferred stock, the debt securities, the warrants and the units collectively are referred to in this prospectus as the "securities."

We have summarized below the material terms of the various types of securities that we may offer. We will describe in the applicable prospectus supplement the detailed terms of the securities offered by that supplement. If indicated in the prospectus supplement, the terms of the offered securities may differ from the terms summarized below.

This prospectus may not be used to sell our securities unless it is accompanied by the applicable prospectus supplement.

DESCRIPTION OF SECURITIES

The following is a summary of all material characteristics of our capital stock as set forth in our amended and restated articles of incorporation and bylaws, as amended. Copies of these documents are filed or incorporated by reference as exhibits to the registration statement, of which this prospectus forms a part.

DESCRIPTION OF COMMON STOCK

We are presently authorized to issue 150,000,000 shares of \$0.00041666 par value common stock and 50,000,000 shares of \$0.001 par value preferred stock. As of November 19, 2014 we had 27,639,688 shares of common stock issued and outstanding, and we had outstanding warrants to purchase an additional 11,172,426 shares of our common stock.

We have one class of common stock. Holders of our common stock are entitled to one vote per share on all matters to be voted upon by stockholders and do not have cumulative voting rights in the election of directors. Holders of shares of common stock are entitled to receive on a pro rata basis such dividends, if any, as may be declared from time to time by our board of directors in its discretion from funds legally available for that use, subject to any preferential dividend rights of outstanding preferred stock. They are also entitled to share on a pro rata basis in any distribution to our common stockholders upon our liquidation, dissolution or winding up, subject to the prior rights of any outstanding preferred stock. Common stockholders do not have preemptive rights to subscribe to any additional stock issuances by us, and they do not have the right to require the redemption of their shares or the conversion of their shares into any other class of our stock. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock that we may designate and issue in the future.

The following provisions of our articles of incorporation and bylaws could have the effect of delaying or discouraging another party from acquiring control of us and could encourage persons seeking to acquire control of us to first negotiate with our board of directors:

- our bylaws permit stockholders to call a special meeting of stockholders only if the holders of a majority of the voting power of our outstanding stock request such a meeting;
- our bylaws provide that our board of directors will establish the authorized number of directors from time to time;
- \cdot our articles of incorporation do not permit cumulative voting in the election of directors; and

• our articles of incorporation permit our board of directors to determine the rights, privileges and preferences of any new series of preferred stock, some of which could impede the ability of a person to acquire control of our company.

The transfer agent and registrar of our common stock is Corporate Stock Transfer, Inc. The address of our transfer agent and registrar is 3200 Cherry Creek Drive South, Suite 430, Denver, CO 80209, and its telephone number is (303) 282-4800.

Our common stock is traded on the OTCQB under the symbol "LBIO."

DESCRIPTION OF PREFERRED STOCK

We have authority to issue 50,000,000 shares of preferred stock, par value \$0.001 per share. As of the date of this prospectus, we have 5,694 shares of Series A Convertible Preferred Stock (the "Series A Preferred") issued and outstanding. The rights and restrictions granted or imposed on Series A Preferred shares are described below under the heading "Series A Preferred."

Under our articles of incorporation, our board of directors has the authority, without further action by stockholders, to designate one or more series of preferred stock and to fix the voting powers, designations, preferences, limitations, restrictions and relative rights granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference and sinking fund terms, any or all of which may be preferential to or greater than the rights of the common stock.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock.

We will describe in a prospectus supplement relating to any series of preferred stock being offered the following terms:

- the distinguishing designation of the series of preferred stock;
- the number of shares of the series of preferred stock offered, the liquidation preference per share and the offering price of the series;
- the dividend rate(s), period(s) or payment date(s) or method(s) of calculation applicable to the series of preferred stock;
- whether dividends are cumulative or non-cumulative and, if cumulative, the date from which dividends on the series of preferred stock will accumulate;
- the procedures for any auction and remarketing, if any, for the series of preferred stock;
- the provisions for a sinking fund, if any, for the series of preferred stock;
- the provision for redemption, if applicable, of the series of preferred stock;
- · any listing of the series of preferred stock on any securities exchange;

- the terms and conditions, if applicable, upon which the series of preferred stock will be convertible into common stock, including the conversion price or manner of calculation and conversion period;
- voting rights, if any, of the series of preferred stock;
- · a discussion of any material or special U.S. federal income tax considerations applicable to the series of preferred stock;
- the relative ranking and preferences of the series of preferred stock as to dividend rights and rights upon the liquidation, dissolution or winding up of our affairs;
- any limitations on issuance of any series of preferred stock ranking senior to or on a parity with the series of preferred stock being offered as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs; and
- · any other specific terms, preferences, rights, limitations or restrictions of the series of preferred stock.

Unless we specify otherwise in the applicable prospectus supplement, the preferred stock will rank, relating to dividends and upon our liquidation, dissolution or winding up:

- · senior to all classes or series of our common stock and to all of our equity securities ranking junior to the preferred stock;
- on a parity with all of our equity securities the terms of which specifically provide that the equity securities rank on a parity with the preferred stock; and
- junior to all of our equity securities the terms of which specifically provide that the equity securities rank senior to the preferred stock.

Series A Preferred

In October 2013, we created a new class of preferred stock designated as Series A Convertible Preferred Stock. The shares of Series A Preferred have a stated value of \$1,000 per share and are initially convertible into shares of common stock at a price of \$2.00 per share (subject to adjustment as described below). The rights of the Series A Preferred are set forth in the Certificate of Designation Of Preferences And Rights Of Series A Convertible Preferred Stock (the "Certificate of Designation"), which gives the holders of the Series A Preferred the following rights, preferences and privileges:

The Series A Preferred may, at the option of the holder, be converted at any time or from time to time into fully paid and non-assessable shares of common stock at the conversion price in effect at the time of conversion; provided, that a holder of Series A Preferred may at any given time convert only up to that number of shares of Series A Preferred so that, upon conversion, the aggregate beneficial ownership of the common stock (calculated pursuant to Rule 13d-3 of the Securities Exchange Act of 1934, as amended) of such holder and all persons affiliated with such holder, is not more than 4.99% of the common stock then outstanding (subject to adjustment up to 9.99% solely at the holder's discretion upon 60 days' prior notice). The number of shares into which one share of Series A Preferred shall be convertible is determined by dividing the stated value of \$1,000 per share by the initial Conversion Price. The "Conversion Price" per share for the Series A Preferred is initially equal to \$2.00 (subject to appropriate adjustment for certain events, including stock splits, stock dividends, combinations, recapitalizations or other recapitalizations affecting the Series A Preferred).

The Series A Preferred will automatically be converted into common stock at the then applicable Conversion Price (i) upon the written consent of the holders holding at least a majority of the outstanding shares of Series A Preferred or (ii) if required by us to be able to list our common stock on a national securities exchange; provided, any such conversions will continue to be limited by, and subject to the beneficial ownership conversion limitations set forth above.

Except as otherwise required by law, the holders of shares of Series A Preferred do not have the right to vote on matters that come before the stockholders; provided, that we may not, without the prior written consent of a majority of the outstanding Series A Preferred: (i) amend, alter, or repeal any provision of our Articles of Incorporation (including the Certificate of Designation) or Bylaws in a manner adverse to the Series A Preferred; (ii) create or authorize the creation of or issue any other security convertible into or exercisable for any equity security, having rights, preferences or privileges senior to or on parity with the Series A Preferred, or increase the authorized number of shares of Series A Preferred; or (iii) enter into any agreement with respect to any of the foregoing.

In the event of any dissolution or winding up of this company, whether voluntary or involuntary, the proceeds shall be paid pari passu among the holders of the shares of common stock and the Series A Preferred, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to common stock.

We may not declare, pay or set aside any dividends on shares of any class or series of our capital stock (other than dividends on shares of common stock payable in shares of common stock) unless the holders of the Series A Preferred shall first receive, or simultaneously receive, an equal dividend on each outstanding share of Series A Preferred.

DESCRIPTION OF DEBT SECURITIES

The following is a summary of the general terms of the debt securities that we may offer. We will file a prospectus supplement that may contain additional terms when we issue debt securities. The terms presented here, together with the terms in a related prospectus supplement, will be a description of the material terms of the debt securities. You should also read the indenture under which the debt securities are to be issued. We have filed a form of indenture governing different types of debt securities with the SEC as an exhibit to the registration statement of which this prospectus is a part.

We may issue, from time to time, debt securities, in one or more series. The debt securities we offer will be issued under an indenture between us and the trustee named in the indenture. The debt securities that we may issue include senior debt securities, subordinated debt securities, convertible debt securities and exchangeable debt securities.

The following is a summary of the material provisions of the indenture filed as an exhibit to the registration statement of which this prospectus is a part. For each series of debt securities, the applicable prospectus supplement for the series may change and supplement the summary below.

General Terms of the Indenture

The indenture provides that we may issue debt securities up to the principal amount that we may authorize, and they may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us. For each series of debt securities, any restrictive covenants for those debt securities will be described in the applicable prospectus supplement for those debt securities.

We may issue the debt securities issued under the indenture as "discount securities," which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may, for United States federal income tax purposes, be treated as if they were issued with "original issue discount" because of interest payment and other characteristics. Special U.S. federal income tax considerations applicable to debt securities issued with original issue discount will be described in more detail in any applicable prospectus supplement.

You should refer to the prospectus supplement relating to a particular series of debt securities for a description of the following terms of the debt securities offered by that prospectus supplement and by this prospectus:

- the title and authorized denominations of those debt securities;
- any limit on the aggregate principal amount of that series of debt securities;
- the date or dates on which principal and premium, if any, of the debt securities of that series is payable;
- interest rates, and the dates from which interest, if any, on the debt securities of that series will accrue, and the dates when interest is payable;
- the right, if any, to extend the interest payment periods and the duration of the extensions;
- · if the amount of payments of principal or interest is to be determined by reference to an index or formula, or based on a coin or currency other than that in which the debt securities are stated to be payable, the manner in which these amounts are determined and the calculation agent, if any, with respect thereto;
- the place or places where and the manner in which principal of, premium, if any, and interest, if any, on the debt securities of that series will be payable and the place or places where those debt securities may be presented for transfer and, if applicable, conversion or exchange;
- the period or periods within which, the price or prices at which, the currency or currencies in which, and other terms and conditions upon which those debt securities may be redeemed, in whole or in part, at our option or the option of a holder of those securities, if we or a holder is to have that option;
- our obligation or right, if any, to redeem, repay or purchase those debt securities pursuant to any sinking fund or analogous provision or at the option of a holder of those securities, and the terms and conditions upon which the debt securities will be redeemed, repaid or purchased, in whole or in part, pursuant to that obligation;
- the terms, if any, on which the debt securities of that series will be subordinate in right and priority of payment to our other debt;
- the denominations in which the debt securities will be issuable;
- · if other than the entire principal amount of the debt securities when issued, the portion of the principal amount payable upon acceleration of maturity as a result of a default on our obligations;
- · whether the debt securities will be issued in fully registered form without coupons or in a form registered as to principal only with coupons or in bearer form with coupons;
- whether any securities of that series are to be issued in whole or in part in the form of one or more global securities and the depositary for those global securities;
- · if other than United States dollars, the currency or currencies in which payment of principal of or any premium or interest on those debt securities will be payable;

- if the principal of or any premium or interest on the debt securities of that series is to be payable, or is to be payable at our election or the election of a holder of those securities, in securities or other property, the type and amount of those securities or other property, or the manner of determining that amount, and the period or periods within which, and the terms and conditions upon which, any such election may be made;
- the events of default and covenants relating to the debt securities that are in addition to, or modify or delete, those described in this prospectus;
- conversion or exchange provisions, if any, including conversion or exchange prices or rates and adjustments thereto;
- · whether and upon what terms the debt securities may be defeased, if different from the provisions set forth in the indenture;
- the nature and terms of any security for any secured debt securities;
- the terms applicable to any debt securities issued at a discount from their stated principal amount; and
- · any other material terms of the debt securities.

The applicable prospectus supplement will present material United States federal income tax considerations for holders of any debt securities and the securities exchange or quotation system on which any debt securities are to be listed or quoted.

Conversion or Exchange Rights

Debt securities may be convertible into or exchangeable for shares of our equity securities or other securities. The terms and conditions of conversion or exchange will be stated in the applicable prospectus supplement. The terms will include, among others, the following:

- the conversion or exchange price;
- the conversion or exchange period;
- provisions regarding our ability or the ability of any holder to convert or exchange the debt securities;
- · events requiring adjustment to the conversion or exchange price; and
- provisions affecting conversion or exchange in the event of our redemption of the debt securities.

Consolidation, Merger or Sale

We cannot consolidate or merge with or into, or transfer or lease all or substantially all of our assets to, any person, unless the successor corporation or person to which our assets are transferred or leased is organized under the laws of the United States, any state of the United States or the District of Columbia and it expressly assumes our obligations under the debt securities and the indenture. In addition, we cannot complete such a transaction unless immediately after completing the transaction, no event of default under the indenture, and no event that, after notice or lapse of time or both, would become an event of default under the indenture, has occurred and is continuing. When the person to whom our assets are transferred or leased has assumed our obligations under the debt securities and the indenture except in limited circumstances.

This covenant would not apply to any recapitalization transaction, a change of control affecting us or a highly leveraged transaction, unless the transaction or change of control were structured to include a merger or consolidation or transfer or lease of all or substantially all of our assets.

Events of Default

The indenture provides that the following will be "events of default" with respect to any series of debt securities:

- · failure to pay interest for thirty days after the date payment is due and payable;
- failure to pay principal or premium, if any, on any debt security when due, either at maturity, upon any redemption, by declaration or otherwise and, in the case of technical or administrative difficulties, only if such default persists for a period of more than three business days;
- failure to make sinking fund payments when due and continuance of such default for a period of 30 days;
- failure to perform other covenants for 60 days after notice that performance was required;
- events in bankruptcy, insolvency or reorganization relating to us; or
- any other event of default provided in the applicable officer's certificate, resolution of our board of directors or the supplemental indenture under which we issue a series of debt securities.

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 indenture. For each series of debt securities, any modifications to the above events of default will be described in the applicable prospectus supplement for those debt securities.

The indenture provides that if an event of default specified in the first, second, third, fourth or sixth bullets above occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series may declare the principal amount of all those debt securities (or, in the case of discount securities or indexed securities, that portion of the principal amount as may be specified in the terms of that series) to be due and payable immediately. If an event of default specified in the fifth bullet above occurs and is continuing, then the principal amount of all those debt securities (or, in the case of discount securities or indexed securities, that portion of the principal amount as may be specified in the terms of that series) will be due and payable immediately, without any declaration or other act on the part of the trustee or any holder. In certain cases, holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of holders of all those debt securities, rescind and annul a declaration of acceleration.

The indenture imposes limitations on suits brought by holders of debt securities against us. Except for actions for payment of overdue principal or interest, no holder of debt securities of any series may institute any action against us under the indenture unless:

- the holder has previously given to the trustee written notice of default and continuance of such default;
- the holders of at least 25% in principal amount of the outstanding debt securities of the affected series have requested that the trustee institute the action;

- the requesting holders have offered the trustee indemnity for the reasonable expenses and liabilities that may be incurred by bringing the action;
- the trustee has not instituted the action within 60 days of the request and offer of indemnity; and
- the trustee has not received inconsistent direction by the holders of a majority in principal amount of the outstanding debt securities of the affected series.

We will be required to file annually with the trustee a certificate, signed by one of our officers, stating whether or not the officer knows of any default by us in the performance, observance or fulfillment of any condition or covenant of the indenture.

Discharge, Defeasance and Covenant Defeasance

We can discharge or decrease our obligations under the indenture as stated below.

We may discharge obligations to holders of any series of debt securities that have not already been delivered to the trustee for cancellation and that have either become due and payable or are by their terms to become due and payable, or are scheduled for redemption, within one year. We may effect a discharge by irrevocably depositing with the trustee cash or government obligations denominated in the currency of the debt securities, as trust funds, in an amount certified to be enough to pay when due, whether at maturity, upon redemption or otherwise, the principal of, and any premium and interest on, the debt securities and any mandatory sinking fund payments.

Unless otherwise provided in the applicable prospectus supplement, we may also discharge any and all of our obligations to holders of any series of debt securities at any time, which we refer to as defeasance. We may also be released from the obligations imposed by any covenants of any outstanding series of debt securities and provisions of the indenture, and we may omit to comply with those covenants without creating an event of default under the trust declaration, which we refer to as covenant defeasance. We may effect defeasance and covenant defeasance only if, among other things:

- we irrevocably deposit with the trustee cash or government obligations denominated in the currency of the debt securities, as trust funds, in an amount certified to be enough to pay at maturity, or upon redemption, the principal (including any mandatory sinking fund payments) of, and any premium and interest on, all outstanding debt securities of the series; and
- we deliver to the trustee an opinion of counsel from a nationally recognized law firm to the effect that the holders of the series of debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the defeasance or covenant defeasance and that defeasance or covenant defeasance will not otherwise alter the holders' U.S. federal income tax treatment of principal, and any premium and interest payments on, the series of debt securities.

In the case of a defeasance by us, the opinion we deliver must be based on a ruling of the Internal Revenue Service issued, or a change in U.S. federal income tax law occurring, after the date of the indenture, since such a result would not occur under the U.S. federal income tax laws in effect on that date.

Although we may discharge or decrease our obligations under the indenture as described in the preceding paragraphs, we may not avoid, among other things, our duty to register the transfer or exchange of any series of debt securities, to replace any temporary, mutilated, destroyed, lost or stolen series of debt securities or to maintain an office or agency in respect of any series of debt securities.

Modification of the Indenture

The indenture provides that we and the trustee may enter into supplemental indentures without the consent of the holders of debt securities to, among other things:

- · evidence the assumption by a successor entity of our obligations;
- add to our covenants for the benefit of the holders of debt securities, or to surrender any rights or power conferred upon us;
- add any additional events of default;
- cure any ambiguity or correct any inconsistency or defect in the indenture;
- add to, change or eliminate any of the provisions of the indenture in a manner that will become effective only when there is no outstanding debt security which is entitled to the benefit of the provision as to which the modification would apply;
- secure any debt securities;
- establish the forms or terms of debt securities of any series;
- evidence and provide for the acceptance of appointment by a successor trustee and add to or change any of the provisions of the indenture as is necessary for the administration of the trusts by more than one trustee;
- modify, eliminate or add to the provisions of the indenture as shall be necessary to effect the qualification of the indenture under the Trust Indenture Act of 1939, as amended, or under any similar federal statute later enacted, and to add to the indenture such other provisions as may be expressly required by the Trust Indenture Act; and
- make any other provisions with respect to matters or questions arising under the indenture that will not be inconsistent with any provision of the indenture as long as the new provisions do not adversely affect the interests of the holders of any outstanding debt securities of any series created prior to the modification.

The indenture also provides that we and the trustee may, with the consent of the holders of not less than a majority in aggregate principal amount of debt securities of each series of debt securities affected by such supplemental indenture then outstanding, add any provisions to, or change in any manner, eliminate or modify in any way the provisions of, the indenture or any supplemental indenture or modify in any manner the rights of the holders of the debt securities. We and the trustee may not, however, without the consent of the holder of each outstanding debt security affected thereby:

- · extend the final maturity of any debt security;
- reduce the principal amount or premium, if any;
- · reduce the rate or extend the time of payment of interest;
- · reduce the amount of the principal of any debt security issued with an original issue discount that is payable upon acceleration;

- change the currency in which the principal, and any premium or interest, is payable;
- · impair the right to institute suit for the enforcement of any payment on any debt security when due;
- if applicable, adversely affect the right of a holder to convert or exchange a debt security; or
- · reduce the percentage of holders of debt securities of any series whose consent is required for any modification of the indenture or for waivers of compliance with or defaults under the indenture with respect to debt securities of that series.

The indenture provides that the holders of not less than a majority in aggregate principal amount of the then-outstanding debt securities of any series, by notice to the relevant trustee, may on behalf of the holders of the debt securities of that series waive any default and its consequences under the indenture except:

- · a default in the payment of, any premium and any interest on, or principal of, any such debt security held by a nonconsenting holder; or
- a default in respect of a covenant or provision of the indenture that cannot be modified or amended without the consent of the holder of each outstanding debt security of each series affected.

Registered Global Securities and Book Entry System

The debt securities of a series may be issued in whole or in part in book-entry form and will be represented by one or more fully registered global securities. We will deposit any registered global securities with a depositary or with a nominee for a depositary identified in the applicable prospectus supplement and registered in the name of such depositary or nominee. In such case, we will issue one or more registered global securities denominated in an amount equal to the aggregate principal amount of all of the debt securities of the series to be issued and represented by such registered global security or securities. This means that we will not issue certificates to each holder.

Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, a registered global security may not be transferred except as a whole:

- by the depositary for the registered global security to its nominee;
- by a nominee of the depositary to the depositary or another nominee of the depositary; or
- by the depositary or its nominee to a successor of the depositary or a nominee of the successor.

The prospectus supplement relating to a series of debt securities will describe the specific terms of the depositary arrangement involving any portion of the series represented by a registered global security. We anticipate that the following provisions will apply to all depositary arrangements for debt securities:

- ownership of beneficial interests in a registered global security will be limited to persons that have accounts with the depositary for such registered global security, these persons being referred to as "participants," or persons that may hold interests through participants;
- upon the issuance of a registered global security, the depositary for the registered global security will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal amounts of the debt securities represented by the registered global security beneficially owned by the participants;

- any dealers, underwriters, or agents participating in the distribution of the debt securities will designate the accounts to be credited; and
- ownership of beneficial interests in the registered global security will be shown on, and the transfer of the ownership interests will be effected only through, records maintained by the depositary for the registered global security for interests of participants, and on the records of participants for interests of persons holding through participants.

The laws of some states may require that specified purchasers of securities take physical delivery of the securities in definitive form. These laws may limit the ability of those persons to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary for a registered global security, or its nominee, is the registered owner of the registered global security, the depositary or such nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the registered global security for all purposes under the indenture. Except as stated below, owners of beneficial interests in a registered global security:

- · will not be entitled to have the debt securities represented by a registered global security registered in their names;
- · will not receive or be entitled to receive physical delivery of the debt securities in the definitive form; and
- · will not be considered the owners or holders of the debt securities under the relevant indenture.

Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for the registered global security and, if the person is not a participant, on the procedures of a participant through which the person owns its interest, to exercise any rights of a holder under the indenture.

We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the indenture, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take the action, and the participants would authorize beneficial owners owning through the participants to give or take the action or would otherwise act upon the instructions of beneficial owners holding through them.

We will make payments of principal and premium, if any, and interest, if any, on debt securities represented by a registered global security registered in the name of a depositary or its nominee to the depositary or its nominee, as the case may be, as the registered owners of the registered global security. Neither we nor the trustee, or any other agent of ours or the trustee will be responsible or liable for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

We expect that the depositary for any debt securities represented by a registered global security, upon receipt of any payments of principal and premium, if any, and interest, if any, in respect of the registered global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the registered global security as shown on the records of the depositary. We also expect that standing customer instructions and customary practices will govern payments by participants to owners of beneficial interests in the registered global security held through the participants, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name." We also expect that any of these payments will be the responsibility of the participants.

If the depositary for any debt securities represented by a registered global security is at any time unwilling or unable to continue as depositary or stops being a clearing agency registered under the Securities Exchange Act of 1934, as amended, we will appoint an eligible successor depositary. If we fail to appoint an eligible successor depositary within 90 days, we will issue the debt securities in definitive form in exchange for the registered global security. In addition, we may at any time and in our sole discretion decide not to have any of the debt securities of a series represented by one or more registered global securities. In that event, we will issue debt securities of the series in a definitive form in exchange for all of the registered global securities representing the debt securities. The trustee will register any debt securities issued in definitive form in exchange for a registered global security in the name or names as the depositary, based upon instructions from its participants, shall instruct the trustee.

We may also issue bearer debt securities of a series in the form of one or more global securities, referred to as "bearer global securities." We will deposit these securities with a depositary identified in the prospectus supplement relating to the series. The prospectus supplement relating to a series of debt securities represented by a bearer global security will describe the applicable terms and procedures. These will include the specific terms of the depositary arrangement and any specific procedures for the issuance of debt securities in definitive form in exchange for a bearer global security, in proportion to the series represented by a bearer global security.

Concerning the Trustee

The indenture provides that there may be more than one trustee under the indenture, each for one or more series of debt securities. If there are different trustees for different series of debt securities, each trustee will be a trustee of a trust under the indenture separate and apart from the trust administered by any other trustee under that indenture. Except as otherwise indicated in this prospectus or any prospectus supplement, any action permitted to be taken by a trustee may be taken by such trustee only on the one or more series of debt securities for which it is the trustee under the indenture. Any trustee under the indenture may resign or be removed from one or more series of debt securities. All payments of principal of, and any premium and interest on, and all registration, transfer, exchange, authentication and delivery of, the debt securities of a series will be effected by the trustee for that series at an office designated by the trustee.

The indenture provides that, except during the continuance of an event of default, the trustee will perform only such duties as are specifically set forth in the indenture. During the existence of an event of default, the trustee will exercise those rights and powers vested in it under the indenture and use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

If the trustee becomes a creditor of ours, the indenture places limitations on the right of the trustee to obtain payment of claims or to realize on property received in respect of any such claim as security or otherwise. The trustee may engage in other transactions. If it acquires any conflicting interest relating to any duties concerning the debt securities, however, it must eliminate the conflict or resign as trustee.

No Individual Liability of Incorporators, Stockholders, Officers or Directors

The indenture provides that no past, present or future director, officer, stockholder or employee of ours, any of our affiliates, or any successor corporation, in their capacity as such, shall have any individual liability for any of our obligations, covenants or agreements under the debt securities or the indenture.

Governing Law

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

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of our common stock or preferred stock or of debt securities. We may issue warrants independently or together with other securities, and the warrants may be attached to or separate from any offered securities. If a series of warrants will be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent, we will so specify in the applicable prospectus supplement. The following summary of the material provisions of the warrants and warrant agreements is subject to, and qualified in its entirety by reference to, all the provisions of the warrants and any warrant agreement applicable to a particular series of warrants. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. We urge you to read the applicable prospectus supplement, as well as the complete warrants and warrant agreements that contain the terms of the warrants.

The material terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

- the number of shares of common stock or preferred stock purchasable upon the exercise of warrants to purchase such shares and the price at which such number of shares may be purchased upon such exercise;
- · a summary of the designation and terms (including, without limitation, liquidation, dividend, conversion and voting rights) of the series of preferred stock purchasable upon exercise of warrants to purchase preferred stock as set forth in the certificate of designation for such series of preferred stock;
- the principal amount of debt securities that may be purchased upon exercise of a debt warrant and the exercise price for the warrants, which may be payable in cash, securities or other property;
- the date, if any, on and after which the warrants and the related debt securities, preferred stock or common stock will be separately transferable;
- the terms of any rights to redeem or call the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- U.S. federal income tax consequences applicable to the warrants; and
- · any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Each warrant will entitle its holder to purchase the principal amount of debt securities or the number of shares of preferred stock or common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

A holder of warrant certificates may exchange them for new warrant certificates of different denominations, present them for registration of transfer and exercise them at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement. Until any warrants to purchase debt securities are exercised, the holder of the warrants will not have any rights of holders of the debt securities that can be purchased upon exercise, including any rights to receive payments of principal, premium or interest on the underlying debt securities or to enforce covenants in the applicable indenture. Until any warrants to purchase common stock or preferred stock are exercised, the holders of the warrants will not have any rights of holders of the underlying common stock or preferred stock, including any rights to receive dividends or payments upon any liquidation, dissolution or winding up on the common stock or preferred stock, if any.

DESCRIPTION OF UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may elect to evidence each series of units by unit certificates that we will issue under a separate unit agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in any applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms, and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- the title of the series of units;
- · identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- · a discussion of certain U.S. federal income tax considerations applicable to the units; and
- · any other material terms of the units and their constituent securities.

PLAN OF DISTRIBUTION

We may sell the securities covered by this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods or through underwriters or dealers, through agents and/or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

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

Each time that we sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us, if applicable.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers, will be described in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any common stock issued by us will be traded on the OTCQB unless we specify otherwise in the prospectus supplement, but any other securities may or may not be publicly traded or listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

If indicated in the applicable prospectus supplement, underwriters or other persons acting as agents may be authorized to solicit offers by institutions or other suitable purchasers to purchase the securities at the public offering price set forth in the prospectus supplement, pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in the prospectus supplement. These purchasers may include, among others, commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions. Delayed delivery contracts will be subject to the condition that the purchase of the securities covered by the delayed delivery contracts will not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject. The underwriters and agents will not have any responsibility with respect to the validity or performance of these contracts.

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 from us 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. 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.

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

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc. ("FINRA"), the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate proceeds of the offering.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

LEGAL MATTERS

TroyGould PC, Los Angeles, California, and Crone Kline Rinde LLP, New York, have rendered opinions about certain matters with respect to the securities offered by this prospectus. Certain members, employees and of counsel of TroyGould PC beneficially own in the aggregate 560,000 shares and options or warrants to acquire shares of our common stock. The beneficial ownership of our shares described above includes all options that may be exercised within 60 days from the date of this prospectus.

EXPERTS

Our financial statements for the years ended December 31, 2013 and December 31, 2012 and for the period September 17, 2007 (inception) to December 31, 2013, which are incorporated into this prospectus by reference to our Annual Report on Form 10-K for the year ended December 31, 2013, have been so incorporated in reliance on the report of Weinberg & Company, P.A., independent registered public accounting firm, upon the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and, in accordance with that act, file periodic reports and other information with the SEC. The periodic reports and other information filed by us are available for inspection and copying at prescribed rates at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about the operation of the SEC's Public Reference Room. The SEC also maintains an Internet site that contains all reports and other information that we file electronically with the SEC. The address of that website is www.sec.gov.

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act for the securities offered under this prospectus (the "Form S-3 Registration Statement"). The Form S-3 Registration Statement, including the exhibits to the Form S-3 Registration Statement, contains additional information about us and the securities offered by this prospectus. The rules and regulations of the SEC allow us to omit from this prospectus certain information that is included in the Form S-3 Registration Statement. For further information about us and our securities, you should review the Form S-3 Registration Statement and the exhibits filed with the Form S-3 Registration Statement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate into this prospectus by reference the information we file with it, which means that we can disclose important information to you by referring you to the documents containing that information. The information incorporated by reference is considered to be part of this prospectus, and information that we later file with the SEC will automatically update and, where applicable, modify or supersede that information.

We incorporate by reference into this prospectus the following documents that we have filed, or will file, with the SEC:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed with the SEC on March 28, 2014;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2014, June 30, 2014, and September 30, 2014 filed with the SEC on May 14, 2014, August 8, 2014 and November 13, 2014, respectively;
- Our Current Reports on Form 8-K filed with the SEC on April 8, 2014, May 19, 2014, July 23, 2014, July 25, 2014, July 30, 2014, August 26 2014, September 9, 2014, November 5, 2014, and November 12, 2014, respectively; and
- Each document that we file with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date on which we filed the Form S-3 Registration Statement and before the termination of this offering, with information in each such filing to be deemed to be incorporated by reference into this prospectus as of the date we make the filing with the SEC.

You may request a copy of any of these filings from us at no cost by writing or calling our Chief Financial Officer at the following address or telephone number: Lion Biotechnologies, Inc., 21900 Burbank Boulevard, Third Floor, Woodland Hills, California 91367; (818) 992-3126.

Notwithstanding the foregoing, no portion of any document that is "furnished" but not "filed" in accordance with SEC rules under Exchange Act shall be deemed to be incorporated by reference into the Form S-3 Registration Statement. Any statement contained in the Form S-3 Registration Statement or in a document incorporated by reference into the Form S-3 Registration Statement will be deemed to be modified or superseded for purposes of the Form S-3 Registration Statement to the extent that a statement contained in the Form S-3 Registration Statement or in any other subsequently filed document that is incorporated by reference into the Form S-3 Registration Statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of the Form S-3 Registration Statement.

PROSPECTUS

\$100,000,000

LION BIOTECHNOLOGIES, INC.

Common Stock Preferred Stock Debt Securities Warrants Units

The date of this prospectus is , 2014.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses to be paid by us, other than underwriting discounts and commissions, in connection with the offering of the securities described in this registration statement. All amounts shown are estimates except for the Securities and Exchange Commission registration fee and FINRA filing fee.

Securities and Exchange Commission registration fee	\$ 11,620
FINRA fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous expenses	*
Total	\$ *

^{*} These fees and expenses will be based upon the number of securities offerings and the amount of securities offered and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers.

Pursuant to our amended and restated articles of incorporation, none of our directors or officers will have any personal liability to us or our stockholders for damages for breach of fiduciary duty as a director or officer, except for damages for breach of fiduciary duty resulting from (1) acts or omissions which involve intentional misconduct, fraud or a knowing violation of law or (2) the payment of dividends in violation of the applicable statutes of Nevada.

Section 78.7502 of the Nevada Revised Statutes permits a corporation to indemnify a present or former director, officer, employee or agent of the corporation, or of another entity or enterprise for which such person is or was serving in such capacity at the request of the corporation, who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, except an action by or in the right of the corporation, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred in connection therewith, arising by reason of such person's service in such capacity if such person (1) is not liable pursuant to Section 78.138 of the Nevada Revised Statutes, which sets forth standards for the conduct of directors and officers, or (2) acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to a criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. In the case of actions brought by or in the right of the corporation, however, no indemnification may be made for any claim, issue or matter as to which such person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

Section 78.751 of the Nevada Revised Statutes permits any discretionary indemnification under Section 78.7502 of the Nevada Revised Statutes, unless ordered by a court or advanced to a director or officer by the corporation in accordance with the Nevada Revised Statutes, to be made by a corporation only as authorized in each specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. Such determination must be made (1) by the stockholders, (2) by the board of directors by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding, (3) if a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding so orders, by independent legal counsel in a written opinion, or (4) if a quorum consisting of directors who were not parties to the action, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion.

Our amended and restated bylaws require us to indemnify our directors and officers in a manner that is consistent with the provisions of Nevada law described in the preceding two paragraphs.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers. Furthermore, we have entered into indemnification agreements with our directors that among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors.

Item 16. Exhibits.

A list of exhibits filed with this Registration Statement on Form S-3 is set forth in the Exhibit Index and is incorporated by reference into this Item 16.

Item 17. Undertakings.

- (a) 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 this 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 this 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 a 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 this registration statement or any material change to such information in this registration statement; provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) 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 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this 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 registr	ation 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 th	ereof.

- (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 this registration statement as of the date the filed prospectus was deemed part of and included in this 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 this 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 this registration statement relating to the securities in this 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 this registration statement or made in a document incorporated or deemed incorporated by reference into this registration statement or prospectus that is a part of this registration statement will, as to a purchaser with a time of contract sale prior to such effective date, supersede or modify any statement that was made in this registration statement or prospectus that was a part of this 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 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.

- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (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 this 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.
- (c) 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.
- (d) The undersigned registrant hereby undertakes 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 (the "Act") in accordance with the rules and regulations prescribed by the SEC under section 305(b) (2) of the Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Woodland Hills, California, on November 20, 2014.

LION BIOTECHNOLOGIES, INC.

By: /s/ Manish Singh
Manish Singh, Ph.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Dr. Elma Hawkins and Michael Handelman, and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) promulgated under the Securities Act and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his/her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on November 20, 2014.

Signature	Title
/s/ Manish Singh	
Manish Singh, Ph.D.	Chief Executive Officer (Principal Executive Officer)
/s/ Michael Handelman	Chief Financial Officer
Michael Handelman	(Principal Financial and Accounting Officer)
/s/ Merrill A. McPeak Merrill A. McPeak	Director
/s/ Jay Venkatesan Jay Venkatesan	Director
/s/ Sanford J. Hillsberg Sanford J. Hillsberg	Director
	II-5

EXHIBIT INDEX

Exhibit

Number	Description of Document
1.1	Form of Underwriting Agreement.*
2.1	Agreement and Plan of Merger between Freight Management Corp. (renamed Genesis Biopharma, Inc.) and Genesis Biopharma, Inc. dated March 15, 2010 (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on March 19, 2010).
2.2	Asset Purchase Agreement among Freight Management Corp. (renamed Genesis Biopharma, Inc.), Genesis Biopharma, Inc., Hamilton Atlantic and the other signatories thereto dated March 15, 2010 (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on March 19, 2010).
3.1	Amended and Restated Articles of Incorporation filed with the Nevada Secretary of State on September 24, 2013 (incorporated herein by reference to the Registrant's Definitive Information Statement on Schedule 14C filed with the Commission on August 20, 2013).
3.2	Bylaws (incorporated herein by reference to the Registrant's Registration Statement on Form SB-2 filed with the Commission on January 29, 2008).
3.3	Amendment to Bylaws (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on May 29, 2013).
4.1	Form of Indenture (filed with this registration statement)
4.2	Form of Common Stock Certificate Lion Biotechnologies, Inc. *
4.3	Form of Warrant.*
4.4	Form of Warrant Agreement.*
4.5	Form of Preferred Stock Certificate.*
4.6	Form of Debt Security.*
4.7	Form of Unit Agreement.*
5.1	Opinion of TroyGould PC (filed with this registration statement)
5.2	Opinion of Crone Kline Rinde LLP (filed with this registration statement)
23.1	Consent of Weinberg & Company (filed with this registration statement)
23.2	Consent of TroyGould PC (included in Exhibit 5.1).
23.3	Consent of Crone Kline Rinde LLP (included in Exhibit 5.2).
24.1	Power of Attorney (included in Part II of this registration statement).
25.1	Statement of Eligibility of Trustee on Form T-1 under the Trust Indenture Act of 1939, as amended.**

^{*} To be filed, if applicable, subsequent to the effectiveness of this registration statement (1) by an amendment to this registration statement or (2) as an exhibit to a Current Report on Form 8-K and incorporated herein by reference.

^{**} If applicable, to be filed subsequent to the effectiveness of this registration statement pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939, as amended.

LION	BIOTI	ECHNO	LOGIES	, INC.

TO

[], as Trustee

Indenture

Dated as of ,

LION BIOTECHNOLOGIES, INC.

Reconciliation and tie between Trust Indenture Act of 1939

and Indenture, dated as of _____,

Trust Indenture	Indenture
Act Section	Sections
§ 310 (a)(1)	609
(a)(2)	609
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(a)(5)	609
(b)	608
	610
§ 311 (a)	613(a)
(b)	613(b)
(b)(2)	703(a)(2)
	703(b)
§ 312 (a)	701
	702(a)
(b)	702(b)
(c)	702(c)
§ 313 (a)	703(a)
(b)	703(b)
(c)	703(a), 703(b)
(d)	703(c)
§ 314 (a)	704, 1004
(b)	Not Applicable
(c)(1)	102
(c)(2)	102
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	102
§ 315 (a)	601(a)
(b)	602
	703(a)(7)
(c)	601(b)
(d)	601(c)
(d)(l)	601(a)(1)
(d)(2)	601(c)(2)
(d)(3)	601(c)(3)
(e)	514
§ 316 (a)	101
(a)(1)(A)	502
	512
(a)(1)(B)	513
(a)(2)	Not Applicable
(b)	508
(c)	104(g)
§ 317 (a)(l)	503
(a)(2)	504
(b)	1003
§ 318 (a)	107

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

TABLE OF CONTENTS

ARTICLE 1	DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION		
	Section 1.01	Definitions	1
	Section 1.02	Compliance Certificates and Opinions	1
	Section 1.03	Form of Documents Delivered to Trustee	7
	Section 1.04	Acts of Holders	7
	Section 1.05	Notices, Etc. to Trustee and Company	8
	Section 1.06	Notice to Holders	9
	Section 1.07	Conflict With Trust Indenture Act	9
	Section 1.08	Effect of Headings and Table of Contents	10
	Section 1.09	Successors and Assigns	10
	Section 1.10	Separability Clause	10
	Section 1.11	Benefits of Indenture	10
	Section 1.12	Governing Law	10
	Section 1.13	Legal Holidays	11
	Section 1.14	Rules by Trustee and Agents	11
	Section 1.15	No Recourse Against Others	11
ARTICLE 2	SECURITY FORMS		11
	Section 2.01	Forms Generally	11
	Section 2.02	Form of Trustee's Certificate of Authentication	12
ARTICLE 3	THE SECURITIES		12
	Section 3.01	Amount Unlimited	12
	Section 3.02	Denominations	15
	Section 3.03	Execution, Authentication, Delivery and Dating	15
	Section 3.04	Temporary Securities	16
	Section 3.05	Registration, Registration of Transfer and Exchange	17
	Section 3.06	Mutilated, Destroyed, Lost and Stolen Securities	18
	Section 3.07	Payment of Interest	19
	Section 3.08	Persons Deemed Owners	20
	Section 3.09	Cancellation	21
	Section 3.10	Computation of Interest	21
	Section 3.11	Global Securities	21
	Section 3.12	Extension of Interest Payment	22
ARTICLE 4	SATISFACTION AND DISCHARGE		22
	Section 4.01	Termination of Company's Obligations	22
	Section 4.02	Defeasance and Discharge of Indenture	23
	Section 4.03	Defeasance of Certain Obligations	24
	Section 4.04	Conditions to Defeasance	24
	Section 4.05	Application of Trust Money	25

i

TABLE OF CONTENTS (cont.)

			Page
Section 4.06 Rein	nstatement		26
ARTICLE 5	REMEDIES		26
	Section 5.01	Events of Default	26
	Section 5.02	Acceleration of Maturity	27
	Section 5.03	Collection of Indebtedness and Suits for Enforcement by Trustee	28
	Section 5.04	Trustee May File Proofs of Claim	28
	Section 5.05	Trustee May Enforce Claims Without Possession of Securities or Coupons	29
	Section 5.06	Application of Money Collected	29
	Section 5.07	Limitation on Suits	29
	Section 5.08	Unconditional Right of Holders to Receive Principal, Premium and Interest	30
	Section 5.09	Restoration of Rights and Remedies	30
	Section 5.10	Rights and Remedies Cumulative	30
	Section 5.11	Delay or Omission Not Waiver	30
	Section 5.12	Control by Holders	31
	Section 5.13	Waiver of Past Defaults	31
	Section 5.14	Undertaking for Costs	31
	Section 5.15	Waiver of Stay or Extension Laws	32
ARTICLE 6	THE TRUSTEE		32
	Section 6.01	Certain Duties and Responsibilities	32
	Section 6.02	Notice of Defaults	33
	Section 6.03	Certain Rights of Trustee	33
	Section 6.04	Not Responsible for Recitals or Issuance of Securities	34
	Section 6.05	May Hold Securities	34
	Section 6.06	Money Held in Trust	34
	Section 6.07	Compensation and Reimbursement	34
	Section 6.08	Disqualification	35
	Section 6.09	Corporate Trustee Required	35
	Section 6.10	Resignation and Removal	35
	Section 6.11	Acceptance of Appointment by Successor	37
	Section 6.12	Merger, Conversion, Consolidation or Succession to Business	37
	Section 6.13	Preferential Collection of Claims Against Company	38
	Section 6.14	Appointment of Authenticating Agent	38
ARTICLE 7	HOLDERS' LISTS AND REPOR	RTS BY TRUSTEE AND COMPANY	39
	Section 7.01	Company to Furnish Trustee Names and Addresses of Holders	39
	Section 7.02	Preservation of Information	40
	Section 7.03	Reports by Trustee	41
	Section 7.04	Reports by Company	41

TABLE OF CONTENTS (cont.)

			Page
ARTICLE 8	CONSOLIDATION, MERGER, CONVEYA	NCE OR TRANSFER	42
	Section 8.01	Company May Consolidate, Etc. Only on Certain Terms	42
	Section 8.02	Successor Substituted for the Company	42
ARTICLE 9	SUPPLEMENTAL INDENTURES		42
	Section 9.01	Supplemental Indentures Without Consent of Holders	42
	Section 9.02	Supplemental Indentures With Consent of Holders	44
	Section 9.03	Execution of Supplemental Indentures	45
	Section 9.04	Effect of Supplemental Indentures	45
	Section 9.05	Conformity With Trust Indenture Act	45
	Section 9.06	Reference in Securities to Supplemental Indentures	45
	Section 9.07	Revocation and Effect of Consents	46
	Section 9.08	Modification Without Supplemental Indenture	46
ARTICLE 10	COVENANTS		46
	Section 10.01	Payment of Principal, Premium and Interest	46
	Section 10.02	Maintenance of Office or Agency	47
	Section 10.03	Money for Securities Payments to Be Held in Trust	48
	Section 10.04	Statement as to Compliance	49
	Section 10.05	Corporate Existence	49
	Section 10.06	Waiver of Certain Covenants	49
ARTICLE 11	REDEMPTION OF SECURITIES		50
	Section 11.01	Applicability of Article	50
	Section 11.02	Election to Redeem	50
	Section 11.03	Selection by Trustee of Securities to Be Redeemed	50
	Section 11.04	Notice of Redemption	50
	Section 11.05	Securities Payable on Redemption Date	52
	Section 11.06	Securities Redeemed in Part	52
ARTICLE 12	REPAYMENT OF SECURITIES AT OPTIO	N OF HOLDERS	52
	Section 12.01	Applicability of Article	52
	Section 12.02	Notice of Repayment Date	52
	Section 12.03	Securities Payable on Repayment Date	53
	Section 12.04	Securities Repaid in Part	54
		iii	

under the laws of No	RE, dated as of,, between Lion Biotechnologies, Inc., a corporation duly organized and existing evada (herein called the " Company "), having its principal office at 21900 Burbank Blvd, Third Floor, Woodland Hills, California 91367, (herein called the " Trustee ").
RECITALS OF THI	E COMPANY
debentures, notes or	any has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of its unsecured other evidences of indebtedness (each herein called a "Security" or, collectively, the "Securities"), in an unlimited aggregate principal in one or more series as in this Indenture provided.
All things i	necessary to make this Indenture a valid agreement of the Company, in accordance with its terms, have been done.
NOW, THI	EREFORE, THIS INDENTURE WITNESSETH:
	consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal enefit of all Holders of the Securities or of any series thereof, as follows:
ARTICLE 1	
DEFINITIONS AN	ND OTHER PROVISIONS OF GENERAL APPLICATION
Section 1.01	<u>Definitions</u> .
For all purp	poses 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 assigned to them the	, and the second
computation require	all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted es, and, except as otherwise herein expressly provided, the term "generally accepted accounting principles" with respect to any ed or permitted hereunder shall mean such accounting principles as are generally accepted in the United States at the date of such the election of the Company from time to time, at the date of the execution and delivery of this Indenture;
(4	the word "or" is not exclusive; and
(5 particular Article, S	the words "herein", "hereof" and "hereunder" and other words of similar import refer to this Indenture as a whole and not to any ection or other subdivision.
Certain terr	ms, used principally in Article Six, are defined in that Article.
"Act," whe	en used with respect to any Holder, has the meaning specified in Section 104.
	of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common pecified 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 to act on behalf of the Trustee to authenticate Securities.

"Authorized Newspaper" means a newspaper in an official language of the country of publication or in the English language, customarily published on each Business Day, whether or not published on Saturdays, Sundays or holidays, and of general circulation in the place in connection with which the term is used. Whenever successive publications are required to be made in Authorized Newspapers, the successive publications may be made in the same or in different newspapers in the same city meeting the foregoing requirements and in each case on any Business Day. If it shall be impossible or impractical to make any publication of any notice required by this Indenture in the manner herein provided, any publication or other notice in lieu thereof that is made or given by the Trustee shall constitute a sufficient publication of such notice.

"Authorized Officer" means any person (whether designated by name or the persons for the time being holding a designated office) appointed by or pursuant to a Board Resolution for the purpose, or a particular purpose, of this Indenture, provided that written notice of such appointment shall have been given to the Trustee.

"Board of Directors" means either the board of directors of the Company or any duly authorized committee of that board.

"Board Resolution" when used with reference to the Company means a copy of 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, and delivered to the Trustee.

"Business Day", when used with respect to any Place of Payment or any other particular location specified in the Securities or this Indenture, means each Monday, Tuesday, Wednesday, Thursday and Friday that is not a day on which banking institutions in that Place of Payment, such other location or the city in which the Corporate Trust Office of the Trustee is located, are authorized or obligated by law to close, except as may be otherwise specified as contemplated by Section 301(b).

"Commission" means the Securities and Exchange Commission, as from time to time constituted, created under the Securities Exchange Act of 1934, or, if at any time after the execution of this indenture such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties at such time.

"Company" means the Person named as the "Company" in the first paragraph of this instrument until a successor Person has become such pursuant to the applicable provisions of this Indenture, and thereafter "Company" shall mean such successor Person.

"Company Request" or "Company Order" means a written request or order signed in the name of the Company by an Authorized Officer and delivered to the Trustee.

"Corporate Trust Office" means the office of the Trustee at which at any particular time its corporate trust business shall be principally administered and which at the date hereof is located at

"corporation" means a corporation, association, joint stock company, limited liability company or business trust.

"Defaulted Interest" has the meaning specified in Section 307.

"Depositary" means, with respect to the Securities of any series issuable or issued in the form of a Global Security, the Person designated as Depositary by the Company in Section 301(b) until a successor Depositary shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Depositary" shall mean or include each Person who is then a Depositary hereunder, and if at any time there is more than one such Person, "Depositary" as used with respect to the Securities of any such series shall mean the Depositary with respect to the Securities of that series.

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

"Eligible Obligations" means:

- (a) with respect to Securities denominated in Dollars, U.S. Government Obligations; or
- (b) with respect to Securities denominated in a currency other than Dollars or in a composite currency, such other obligations or instruments as shall be specified with respect to such Securities, as contemplated by Section 301(b).

"Event of Default" has the meaning specified in Section 501.

"Global Security" means a Security, if any, issued to evidence all or a part of a series of Securities in accordance with Section 301.

"Hedging Obligations" means, with respect to any Person, the obligations of such Person under (i) interest rate swap agreements, interest rate cap agreements and interest rate collar agreements and (ii) other agreements or arrangements designed to protect such Person against fluctuations in interest rates.

"**Holder**" means, with respect to a Registered Security, a Person in whose name such Registered Security is registered in the Security Register and, with respect to an Unregistered Security or coupon appertaining thereto, the bearer thereof.

"**Indenture**" means this instrument as originally executed and as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the form and terms of particular series of Securities established as contemplated by Section 301.

"**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 that by its terms bears interest only after Maturity, means 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.

"Maturity," when used with respect to any Security, means the date on which the principal 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, upon call for redemption, exercise of repayment option or otherwise.

"Officer's Certificate" means a certificate signed by an Authorized Officer and delivered to the Trustee.

- "Opinion of Counsel" means a written opinion of counsel, who may be an employee of, or counsel for, the Company or an Affiliate of the Company, and who shall be reasonably acceptable to the Trustee.
- "Original Issue Discount Security" means any Security that provides for an amount 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 of any series, means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, *except*:
 - (a) Securities theretofore cancelled by the Trustee or delivered to the Trustee for cancellation;
- (c) Securities or portions thereof for whose payment or redemption money or Eligible Obligations (or any combination of money and Eligible Obligations) in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent (other than the Company or any other obligor on such Security) in trust or set aside and segregated in trust by the Company or any other obligor on such Security (if the Company or any other obligor on such Security acts as its own Paying Agent) for the Holders of such Securities; *provided*, *however*, that if such Securities, or portions thereof, are to be redeemed prior to the Stated Maturity thereof, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;
 - (d) Securities as to which the Company has effected defeasance as provided in Section 402;
- (e) Securities that 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 have been presented to the Trustee proof satisfactory to it and the Company 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, made or taken any request, demand, authorization, direction, notice, consent, waiver or other action hereunder,

(i) Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor (unless the Company, such Affiliate or such obligor owns (x) all Securities Outstanding under this Indenture or (y) except for the purposes of actions to be taken by Holders of more than one series or Tranche voting as a class, all Outstanding Securities of each such series and each such Tranche, as the case may be, determined without regard to this clause) shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities that the Trustee knows to be so owned shall be so disregarded. Securities so owned that have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right 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;

- (ii) in determining whether the Holders of the requisite principal amount of Securities of any series or Tranche have concurred in any direction, waiver or consent, the principal amount of Original Issue Discount Securities that shall be deemed to be outstanding shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon acceleration of the maturity thereof pursuant to Section 502;
- (iii) in the case of any Security the principal of that is payable from time to time without presentment or surrender, the principal amount of such Security that shall be deemed to be Outstanding at any time for all purposes of this Indenture shall be the original principal amount thereof less the aggregate amount of principal thereof theretofore paid; and
- (iv) in the case of Securities having been denominated in a currency other than Dollars and remaining outstanding contemporaneously with Securities denominated in Dollars, the principal amount of any Security that is denominated in a currency other than Dollars or in a composite currency that shall be deemed to be Outstanding for such purposes shall be determined as contemplated by Section 301(b).
- "Paying Agent" means any Person, including the Company, authorized by the Company to pay the principal of (and premium, if any) or interest on any Securities on behalf of the Company.
- "**Periodic Offering**" means an offering of Securities of a series from time to time any or all of the specific terms of which Securities, including without limitation the rate or rates of interest, if any, thereon, the Stated Maturity or Maturities thereof and the redemption provisions, if any, with respect thereto, are to be determined by the Company or its agents from time to time subsequent to the initial request for the authentication and delivery of such Securities by the Trustee, all as contemplated in Sections 301 and 303.
- "**Person**" means any individual, corporation, partnership, joint venture, trust, unincorporated organization or government or any agency or political subdivision thereof.
- "Place of Payment", when used with respect to the Securities of any series, or any Tranche thereof, means the place or places where the principal of (and premium, if any) and interest, if any, on the Securities of that series or Tranche are payable as specified as contemplated by Section 301(b).
- "**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 shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security.
- "Redemption Date," when used with respect to any Security to be redeemed, 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 at which it is to be redeemed pursuant to this Indenture, exclusive of accrued and unpaid interest, if any.
- "Registered Security" means any Security issued hereunder and registered by the Security Registrar or any recorded interest in a Global Security issued hereunder.
- "**Regular Record Date**" for the interest payable on any Interest Payment Date on the Securities of any series means the date specified for that purpose as contemplated by Section 301(b).
- "Repayment Date," when used with respect to any Security of any series to be repaid or repurchased, means the date, if any, fixed for such repayment or for such repurchase (whether at the option of the Holders or otherwise) pursuant to this Indenture.

"Repayment Price", when used with respect to any Security of any series to be repaid, means the price, if any, at which it is to be repaid pursuant to Section 301(b).

"Responsible Officer", when used with respect to the Trustee, means any officer within the corporate trust department or any other successor group of the Trustee, including any vice president, assistant vice president, assistant secretary or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer of the Trustee to whom such matter is referred because of his or her knowledge of and familiarity with the particular subject.

"Security" or "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.

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

"series" or "series of Securities" means a series of Securities issued under this Indenture as determined by Board Resolution or as otherwise determined under this Indenture.

"Special Record Date" for the payment of any Defaulted Interest means a date fixed by the Trustee 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 as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

"Subsidiary" of any Person means (a) any corporation, association or other business entity of which more than 50% of the outstanding total voting power ordinarily entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, trustees or other voting members of the governing body thereof is at the time owned or controlled, directly or indirectly, by the Company or by one or more other Subsidiaries, or by the Company and one or more other Subsidiaries or (b) any partnership the sole general partner or the managing general partner of which is the Company or a Subsidiary of the Company or the only general partners of which are the Company or of one or more Subsidiaries of the Company (or any combination thereof).

"**Tranche**" means a group of Securities which (a) are of the same series and (b) have identical terms to other Tranches of such series except as to principal amount, date of issuance or first interest payment date, each of which may vary among Tranches of any one series.

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

"Trust Indenture Act" means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed, except as provided in Section 905.

"U.S. Government Obligations" means (x) any security that is (i) a direct obligation of the United States of America for the payment of which the full faith and credit of the United States of America are pledged or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America, and (y) any depositary receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act of 1933) as custodian with respect to any U.S. Government Obligation

that is specified in clause (x) above and held by such bank for the account of the holder of such depositary receipt, or with respect to any specific payment of principal of or interest on any U.S. Government Obligation which is so specified and held, 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 depositary receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of principal of or interest on the U.S. Government Obligation evidenced by such depositary receipt.

"Unregistered Security" means any Security issued hereunder that is not a Registered Security.

"Vice President", when used with respect to the Company or 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".

Section 1.02 <u>Compliance Certificates and Opinions.</u>

- (a) Except as otherwise expressly provided in this Indenture, upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall, if requested by the Trustee, furnish to the Trustee an Officer's Certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent, 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.
- (b) Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (except for certificates provided for in Section 1004) shall include:
- (1) a statement that each individual signing such certificate or opinion has read such covenant or condition 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 covenant or condition 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 1.03 <u>Form of Documents Delivered to Trustee.</u>

- (a) 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.
- (b) Any certificate, statement or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon a certificate or an Opinion of Counsel, or representations by counsel. Any such certificate, statement or Opinion of Counsel may be based, insofar as it relates to factual matters, upon a certificate, statement or opinion of, or representations by, an officer or officers of the Company stating that the information with respect to such factual matters is in the possession of the Company. Any certificate,

statement or opinion of an officer of the Company or of counsel may be based, insofar as it relates to accounting matters, upon a certificate, statement or opinion of, or representations by, an accountant or firm of accountants in the employ of the Company. Any certificate, statement or opinion of, or representations by, any independent firm of public accountants filed with the Trustee shall contain a statement that such firm is independent.

(c) 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 1.04 Acts of Holders.

- (a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided or permitted by this Indenture to be made, given or taken by Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by an agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments. Proof of execution of any such instrument or of a writing appointing any such agent, or of the holding by any Person of Unregistered Securities, shall be sufficient for any purpose of this Indenture and (subject to Section 601) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section.
- (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 manner acceptable to the Trustee.
- (c) The amount of Unregistered Securities held by any Person executing any such instrument or writings as the Holder thereof, and the numbers of such Unregistered Securities, and the date of his holding the same, may be proved by the production of such Unregistered Securities or by a certificate executed, as depositary, by any trust company, bank, banker or member of a national securities exchange (wherever situated), if such certificate is in form satisfactory to the Trustee, showing that at the date therein mentioned such Person had on deposit with such depositary, or exhibited to it, the Unregistered Securities therein described; or such facts may be proved by the certificate or affidavit of the Person executing such instrument or writing as the Holder thereof, if such certificate or affidavit is in form satisfactory to the Trustee. The Trustee and the Company may assume that such ownership of any Unregistered Securities continues until (1) another certificate bearing a later date issued in respect of the same Unregistered Securities is produced or (2) such Unregistered Securities are produced by some other Person or (3) such Unregistered Securities are registered as to principal or are surrendered in exchange for Registered Securities, or (4) such Unregistered Securities are no longer Outstanding.
- (d) The fact and date of execution of any such instrument or writing and the amount and number of Unregistered Securities held by the Person so executing such instrument or writing may also be proved in any other manner that the Trustee deems sufficient; and the Trustee may in any instance require further proof with respect to any of the matters referred to in this Section.
- (e) The principal amount (except as otherwise contemplated in clause (ii) of the proviso to the definition of "Outstanding") and serial numbers of Securities held by any Person, and the date of holding the same, shall be proved by the Security Register.

(f) Any request, demand, authorization, direction, notice, consent, election, 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 in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee or the Company in reliance thereon, whether or not notation of such action is made upon such Security.
(g) The Company may set a record date for purposes of determining the identity of Holders of any Outstanding Securities of any series entitled to vote or consent to any action by vote or consent authorized or permitted by Section 512 or 513. Such record date shall be not less than 10 nor more than 60 days prior to the first solicitation of such consent or the date of the most recent list of Holders of such Securities furnished to the Trustee pursuant to Section 701 prior to such solicitation.
(h) If the Company solicits from Holders any request, demand, authorization, direction, notice, consent, election, waiver or other Act, the Company may, at its option, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, election, waiver or other Act, but the Company shall have no obligation to do so. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, election, 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 the record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of the Outstanding Securities have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, election, waiver or other Act, and for that purpose the Outstanding Securities shall be computed as of the record date.
Section 1.05 Notices, Etc. to Trustee and Company.
Except as otherwise provided herein, any request, demand, authorization, direction, notice, consent, election, 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,
(a) 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 its Corporate Trust Office, Attention:
(b) 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 instrument or at any other address furnished in writing to the Trustee by the Company prior to such mailing.
Section 1.06 <u>Notice to Holders; Waiver</u> .
(a) Except as otherwise expressly provided herein, where this Indenture provides for notice of any event or reports to Holders, such notice or report shall be sufficiently given if in writing and mailed, first-class postage prepaid, to each Holder of Registered Securities affected by such event, at the address of such Holder as it appears in the Security Register and to addresses filed with the Trustee or preserved on the Trustee's list pursuant to Section 702(a) for other Holders (and to such other addressees as may be required in the case of such notice or report under Section 313(c) of the Trust Indenture Act), not later than the latest date, and not earlier than the earliest date, prescribed for the giving of such notice or report.
(b) In any case where notice to Holders is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders.

- (c) Notice shall be sufficiently given to Holders of Unregistered Securities if published in an Authorized Newspaper in each of The City of New York and, if such Securities are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located, or in such other city or cities as may be specified in the Securities, at least twice, the first publication to be not earlier than the earliest date, if any, and not later than the last date, if any, prescribed for the giving of such notice.
- (d) 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.
- (e) In case by reason of the suspension of regular mail service or by reason of any other cause it is impracticable to give such notice by mail, then such notification as shall be made at the direction of the Company and with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder.
- (f) If it is impractical in the opinion of the Trustee or the Company to make any publication of any notice required hereby in an Authorized Newspaper, any publication or other notice in lieu thereof that is made or given with the approval of the Trustee shall constitute a sufficient publication of such notice.

Section 1.07 <u>Conflict With Trust Indenture Act.</u>

If any provision hereof limits, qualifies or conflicts with a provision of the Trust Indenture Act that is required under the Trust Indenture Act to be a part of and govern this Indenture, the latter 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.

Section 1.08 <u>Effect of Headings and Table of Contents.</u>

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

Section 1.09 <u>Successors and Assigns.</u>

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

Section 1.10 <u>Separability Clause</u>.

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

Section 1.11 <u>Benefits of Indenture.</u>

Nothing in this Indenture or in the Securities, express or implied, shall give to any Person, other than the parties hereto (including any Paying Agent appointed pursuant to Section 1002 and Authenticating Agent appointed pursuant to Section 614 to the extent provided herein) and their successors hereunder and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 1.12 <u>Governing Law.</u>

This Indenture and the Securities shall be governed by and construed in accordance with the laws of the State of New York in the United States, but without giving effect to the conflicts of laws principles thereof.

Section 1.13 <u>Legal Holidays</u>.

In any case where any Interest Payment Date, Redemption Date, Repayment Date or Stated Maturity of any Security is not a Business Day at any Place of Payment or the city in which the Corporate Trust Office of the Trustee is located, then (notwithstanding any other provision of this Indenture or of the Securities, other than a provision in Securities of any series, or in the Board Resolution, Supplemental Indenture or Officer's Certificate that establishes the terms of such Securities, that specifically states that such provision shall apply in lieu of this Section) payment of interest or principal (and premium, if any) need not be made at such Place of Payment on such date, but may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date or Redemption Date, Repayment Date, or at the Stated Maturity, and such extension of time shall in such case be (1) excluded in the computation of interest, if any, accruing on such Security at a floating rate; provided, however, that if such extension would cause payment of interest at a floating rate to be made in the next following calendar month, such payment shall be made on the next preceding Business Day.

Section 1.14 <u>Rules by Trustee and Agents.</u>

The Trustee may make reasonable rules for action by or at a meeting of Holders of one or more series. The Paying Agent or Security Registrar may make reasonable rules and set reasonable requirements for its functions.

Section 1.15 No Recourse Against Others.

No past, present or future director, officer, stockholder or employee, as such, of the Company or any of its Affiliates or any successor corporation shall have any liability for any obligation, covenant or agreement of the Company under this Indenture or any indenture supplemental hereto, or in the Securities or any coupon appertaining thereto, or for any claim based on, in respect of or by reason of such obligations, covenants or agreements or their creation. Each Holder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for the execution and delivery of this Indenture and the issue of the Securities.

ARTICLE 2

SECURITY FORMS

Section 2.01 Forms Generally.

(a) The Securities of each series and related coupons, if any, shall be in substantially such form as shall be established by or pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be required to comply with law or with any rules or regulations pursuant thereto, or with any rules of any securities exchange or to conform with general usage, all as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution of the Securities. When the form of Securities of any series is established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action shall be delivered to the Trustee at or prior to the delivery of the Company Order contemplated by Section 303 for the authentication and delivery of such Securities.

(b) such Securities, as evide	The definitive Securities shall be produced in such manner or combination of manners, all as determined by the officers executing enced by their execution of such Securities.
Section 2.02	Form of Trustee's Certificate of Authentication.
The Trustee's o	certificate of authentication shall be in substantially the following form:
This is one of t	he Securities of the series designated herein, referred to in the within-mentioned Indenture.

[as Trustee

By:

Authorized Officer

ARTICLE 3

THE SECURITIES

Section 3.01 Amount Unlimited; Issuable in Series.

- (a) The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited.
- (b) The Securities may be issued in one or more series. There shall be established in or pursuant to a Board Resolution, and set forth in an Officer's 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 (which shall distinguish the Securities of the series from all other Securities);
- 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 in exchange for, or in lieu of, other Securities of the series pursuant to Section 304, 305, 306, 906, 1107 or 1204 and except for any Securities that, pursuant to Section 303, are deemed never to have been authenticated and delivered hereunder);
- (3) the date or dates on which the principal and premium, if any, of the Securities of such series, or any Tranche thereof, is payable or any formula or other method or other means by which such date or dates shall be determined, by reference to an index or other fact or event ascertainable outside of this Indenture or otherwise (without regard to any provisions for redemption, prepayment, acceleration, purchase or extension);
- (4) the rate or rates at which the Securities of such series, or any Tranche thereof, shall bear interest, if any (including the rate or rates at which overdue principal shall bear interest, if different from the rate or rates at which such Securities shall bear interest prior to Maturity, and, if applicable, the rate or rates at which overdue premium or interest shall bear interest, if any), or any formula or other method or other means by which such rate or rates shall be determined, by reference to an index or other fact or event ascertainable outside of this Indenture or otherwise; the date or dates from which such interest shall accrue; the Interest Payment Dates on which such interest shall be payable and the Regular Record Date, if

any, for the interest payable on such Securities on any Interest Payment Date; the right of the Company, if any, to extend the
interest payment periods and the duration of any such extension as contemplated by Section 312; and the basis of computation of interest, if other than a
provided in Section 310;

- the place or places where the principal of and premium, if any, and interest, if any, on Securities of the series, or any Tranche thereof, shall be payable, any Registered Securities of the series, or any Tranche thereof, may be surrendered for registration of transfer, Securities of the series, or any Tranche thereof, may be surrendered for exchange, and where notices and demands to or upon the Company in respect of the Securities of the series, or any Tranche thereof, and this Indenture may be served and notices to Holders pursuant to Section 106 will be published; the Security Registrar and any Paying Agent or Agents for such series or Tranche; and if such is the case, that the principal of such Securities shall be payable without presentment or surrender thereof;
- if applicable, the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series, or any Tranche thereof, may be redeemed, in whole or in part, at the option of the Company and, if other than by a Board Resolution, the manner in which any election by the Company to redeem the Securities shall be evidenced;
- (7) the obligation, if any, of the Company to redeem or purchase Securities of the series, or any Tranche thereof, pursuant to any sinking fund or analogous provisions or at the option of the Holder thereof and the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series, or any Tranche thereof, shall be redeemed or purchased, in whole or in part, pursuant to such obligation;
- (8) the terms, if any, on which the Securities of such series will be subordinate in right and priority of payment to other debt of the Company;
- (9) the denominations in which any Registered Securities of the series shall be issuable, if other than denominations of \$1,000 and any integral multiple thereof, and the denominations in which any Unregistered Securities of the series shall be issuable, if other than denominations of \$5,000 and any integral multiple thereof;
- if other than the principal amount thereof, the portion of the principal amount of Securities of the series that shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 502;
- whether Securities of the series are to be issuable in whole or in part as Registered Securities, Unregistered Securities, or both, whether Securities of the series are to be issuable with or without coupons, whether any Securities of the series are to be issuable in whole or in part in the form of a Global Security or Securities and, such case, the Depositary for such Global Security or Securities;
- if other than the currency of the United States of America, the currency or currencies, including composite currencies, in which the principal of or any premium or interest on the Securities of the series shall be payable and the manner of determining the equivalent of any such amount in Dollars is to be determined for any purpose, including for the purpose of determining the principal amount of such Securities deemed to be Outstanding at any time;
- (13) if the principal of or any premium or interest on the Securities of such series is to be payable, or is to be payable at the election of the Company or a Holder thereof, in securities or other property, the type and amount of such securities or other property, or the manner of determining such amount shall be determined, and the period or periods within which, and the terms and conditions upon which, any such election may be made;

(14)	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 is registered	ed at the close of business on the Regular Record Date for such interest, and the manner in which, or the Person to whom
any interest on any Unregistered Sec	urity of the series shall be payable, if otherwise than upon presentation and surrender of the coupons appertaining thereto
, ,	ent to which, or the manner in which, any interest payable on a temporary or permanent Global Security on an interest
payment date will be paid;	
F-J oc para,	

- any addition to or change in the Events of Default, with respect to the Securities of such series, and any addition to or change in the covenants of the Company for the benefit of the Holders of the Securities of such series in addition to those set forth in Article Ten;
- (16) the terms and conditions, if any, pursuant to which the Securities of such series may be converted into or exchanged for securities or other property of the Company or any other Person;
- (17) the terms and conditions, if any, pursuant to which the Company's obligations under this Indenture may be terminated through the deposit of money or Eligible Instruments as provided in Article Four;
- (18) any exceptions to Section 113, or variation in the definition of Business Day, with respect to the Securities of such series;
 - (19) any collateral security, assurance or guaranty for the Securities of such series;
- (20) the non-applicability of Section 608 to the Securities of such series or any exceptions or modifications of Section 608 with respect to the Securities of such series;
- any rights or duties of another Person to assume the obligations of the Company with respect to the Securities of such series (whether as joint obligor, primary obligor, secondary obligor or substitute obligor) and any rights or duties to discharge and release any obligor with respect to the Securities of such series or this Indenture to the extent related to such series; and
- any other terms, conditions and rights of the series (which terms, conditions and rights shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 901(a)(5)).
- (c) All Securities of any one series (other than Securities offered in a Periodic Offering) and the coupons appertaining to any Unregistered 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 and set forth in such Officer's Certificate or in any such indenture supplemental hereto and as reasonably acceptable to the Trustee. Securities of different series may differ in any respect.
- (d) If the terms and form or forms of any series of Securities are established by or pursuant to a Board Resolution, the Company shall deliver a copy of such Board Resolution to the Trustee at or prior to the issuance of such series with (1) the form or forms of Security that have been approved attached thereto, or (2) if such Board Resolution authorizes a specific officer or officers to approve the terms and form or forms of the Securities, a certificate of such officer or officers approving the terms and form or forms of Security with such form or forms of Securities attached thereto. Such Board Resolution or certificate may provide general terms or parameters for Securities of any series and may provide that the specific terms of particular Securities of a series may be determined in accordance with or pursuant to the Company Order referred to in Section 303.

(e)	With respect to Securities of a series subject to a Periodic Offering, the indenture supplemental hereto or the Board Resolution that
establishes such series,	or the Officer's Certificate pursuant to such supplemental indenture or Board Resolution, as the case may be, may provide general
terms or parameters for	Securities of such series and provide either that the specific terms of Securities of such series shall be specified in a Company Order
or that such terms shall	be determined by the Company or its agents in accordance with procedures specified in a Company Order as contemplated by Section
303(c).	

(f) Unless otherwise specified with respect to a series of Securities pursuant to paragraph (2) of Section 301(b), such series of Securities may be issued in one or more Tranches with various principal amounts without the consent of any Holders and additional Tranches of such series may be authenticated and delivered pursuant to Section 303.

Section 3.02 Denominations.

The Securities of each series shall be issuable in registered or unregistered form with or without coupons in such denominations as shall be specified as contemplated by Section 301(b). In the absence of any such provisions with respect to the Securities of any series, the Registered Securities of such series shall be issuable in denominations of \$1,000 and any integral multiple thereof and the Unregistered Securities of such series shall be issuable in denominations of \$5,000 and any integral multiple thereof.

Section 3.03 <u>Execution, Authentication, Delivery and Dating.</u>

- (a) The Securities shall be signed on behalf of the Company by its chairman of its Board of Directors, its Chief Executive Officer, its President, any Vice President, its Treasurer, or any Assistant Treasurer, under its corporate seal and attested by its Secretary or any Assistant Secretary. The signature of any of these officers on the Securities may be manual or facsimile. The seal of the Company may be in the form of a facsimile thereof and may be impressed, affixed, imprinted or otherwise reproduced on the Securities. Typographical and other minor errors or defects in any such reproduction of the seal or any such signature shall not affect the validity or enforceability of any Security that has been duly authenticated and delivered by the Trustee. The coupons, if any, of Unregistered Securities shall bear the manual or facsimile signature of any one of the officers referred to in the first sentence of this Section 303(a).
- (b) Securities 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.
- At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series (or any Tranche thereof) executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities (or such Tranche), and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities (or such Tranche); provided, however, that with respect to Securities of a series subject to a Periodic Offering, (i) such Company Order may be delivered by the Company to the Trustee prior to the delivery to the Trustee of such Securities for authentication and delivery, (ii) the Trustee shall authenticate and deliver Securities of such series for original issue from time to time, in an aggregate principal amount not exceeding the aggregate principal amount established for such series, all pursuant to a Company Order or pursuant to such procedures acceptable to the Trustee as may be specified from time to time by a Company Order, (iii) the maturity date or dates, original issue date or dates, interest rate or rates and any other terms of Securities of such series shall be determined by Company Order or pursuant to such procedures and (iv) if provided for in such procedures, such Company Order may authorize authentication and delivery pursuant to oral or electronic instructions from the Company or its duly authorized agent or agents, which oral instructions shall be promptly confirmed in writing.

(d) the Trustee shall be entit		enticating such Securities and accepting the additional responsibilities under this Indenture in relation to such Securities, ive, and (subject to Section 601) shall be fully protected in relying upon, an Opinion of Counsel stating:
	(i)	that such form of Securities has been established in conformity with the provisions of this Indenture;
	(ii)	that the terms of such Securities have been established in conformity with the provisions of this Indenture; and
	(iii)	that such Securities, when authenticated and delivered by the Trustee and issued by the Company in the manner and

- (iii) that such Securities, when authenticated and delivered by the Trustee and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights generally and to general principles of equity.
- (e) Notwithstanding the provisions of Section 301 and of the preceding paragraphs of Sections 303(c) and 303(d) in connection with a Periodic Offering, if all Securities of a series are not to be originally issued at one time, it shall not be necessary to deliver an Officer's Certificate or execute a supplemental indenture otherwise required pursuant to Section 301(b) or the Company Order and Opinion of Counsel otherwise required pursuant to such preceding paragraphs at or prior to the time of authentication of each Security of such series if such documents are delivered at or prior to the authentication upon original issuance of the first Security of such series to be issued.
- (f) If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities if the issuance of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner that is not reasonably acceptable to the Trustee.
- (g) Each Registered Security shall be dated the date of its authentication and each Unregistered Security shall be dated the date of its original issuance.
- (h) No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein executed by the Trustee by manual or facsimile signature and no coupon shall be valid until the Security to which it appertains has been so authenticated, 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.
- (i) Notwithstanding the foregoing, until the Company has delivered an Officer's Certificate to the Trustee and the Security Registrar stating that, as a result of the action described, the Company would not suffer adverse consequences under the provisions of United States law or regulations in effect at the time of the delivery of Unregistered Securities, the Trustee or the Security Registrar will (i) deliver Unregistered Securities only outside the United States and its possessions and (ii) release Unregistered Securities in definitive form to the person entitled to physical delivery thereof only upon presentation of a certificate in the form prescribed by the Company.

Section 3.04 <u>Temporary Securities</u>.

(a) Until definitive Securities of any series (including Global Securities) are ready for delivery, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver one or more temporary Securities that are produced in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued and with such appropriate insertions, omissions,

substitutions and other variations as the officers executing such Securities may determine, as evidenced by their execution of such Securities. Temporary Unregistered Securities of a series may have coupons attached or may be in the form of one or more temporary Global Securities that are Unregistered Securities of that series without coupons. Every temporary Security shall be executed by the Company and authenticated by the Trustee (and Registered Securities shall be registered by the Security Registrar) upon the same conditions, and with like effect, as a definitive Security.

- (b) 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 the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations. Until so exchanged the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series.
- (c) Every temporary Unregistered Security shall be substantially in the form approved by or pursuant to a Board Resolution and shall be delivered to one of the Paying Agents located outside the United States and its possessions or to such other person or persons as the Company shall direct against such certification as the Company may from time to time prescribe by or pursuant to a Board Resolution.

Section 3.05 <u>Registration, Registration of Transfer and Exchange.</u>

- (a) The Company shall cause to be kept at the Corporate Trust Office of the Trustee a register (the register maintained in such office and in any other office or agency of the Company in a Place of Payment being herein sometimes collectively referred to as the "Security Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Securities and of transfers of Securities. The Trustee is hereby appointed "Security Registrar" for the purpose of registering Securities and transfers of Securities as herein provided.
- (b) Except in the case of Securities issued in the form of a Global Security, upon surrender for registration of transfer of any Registered Security of any series at the 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.
- (c) If both Registered and Unregistered Securities are authorized for a series of Securities and the terms of such Securities permit, (i) Unregistered Securities may be exchanged for an equal principal amount of Registered or Unregistered Securities of the same series and date of maturity in any authorized denominations upon delivery to the Security Registrar (or a Paying Agent (as herein defined), if the exchange is for Unregistered Securities) of the Unregistered Security with all unmatured coupons and all matured coupons in default appertaining thereto and if all other requirements of the Security Registrar (or such Paying Agent) and such Securities for such exchange are met, and (ii) Registered Securities, other than Securities issued in the form of a Global Security (except as provided in Section 311), may be exchanged for an equal principal amount of Unregistered Securities of the same series and date of maturity in any authorized denominations (except that any coupons appertaining to such Unregistered Securities which have matured and have been paid shall be detached) upon delivery to the Security Registrar of the Registered Securities and if all other requirements of the Security Registrar and such Securities for such exchange are met.
- (d) Notwithstanding the foregoing, the exchange of Unregistered Securities for Registered Securities or Registered Securities for Unregistered Securities will be subject to the satisfaction of the provisions of United States law and regulations in effect at the time of such exchange, and no exchange of

Registered Securities for Unregistered Securities will be made until the Company has notified the Trustee in an Officer's Certificate and the Security Registrar that, as a result of such exchange, the Company would not suffer adverse consequences under such law or regulations.

- (e) All Securities issued upon any registration of transfer 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 exchange.
- (f) Every Security presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) 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 such Holder's attorney duly authorized in writing.
- (g) Unless otherwise provided in a Board Resolution or an Officer's Certificate pursuant to a Board Resolution, or in an indenture supplemental hereto, with respect to Securities of any series, no service charge shall be made to the Holder for any registration of transfer 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 exchange of Securities, other than exchanges pursuant to Section 304, 906, 1106 or 1204 not involving any transfer.
- (h) The Company shall not be required (i) to issue, register the transfer of or exchange Securities of any series during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of Securities of that series selected for redemption under Section 1103 and ending at the close of business on the day of such mailing, or (ii) to register the transfer of or exchange any Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.
 - (i) Unregistered Securities or any coupons appertaining thereto shall be transferable by delivery thereof.

Section 3.06 <u>Mutilated, Destroyed, Lost and Stolen Securities.</u>

- (a) If any mutilated Security or a Security with a mutilated coupon or coupons appertaining to it is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a replacement Registered Security, if such surrendered security was a Registered Security, or a replacement Unregistered Security with coupons corresponding to the coupons appertaining to the surrendered Security, if such surrendered Security was an Unregistered Security, of the same series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.
- (b) If there has been delivered to the Company and the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security or any coupon or coupons appertaining thereto, and (ii) such bond, 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 actual notice to the Company or the Trustee that such Security or any coupon or coupons appertaining thereto has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and deliver, a replacement Registered Security, if such Holder's claim pertains to a Registered Security, or a replacement Unregistered Security with coupons corresponding to the coupons appertaining to the destroyed, lost or stolen Unregistered Security or the Unregistered Security to which such destroyed, lost or stolen coupon or coupons appertains, if such Holder's claim pertains to an Unregistered Security, of the same series (and Tranche, if applicable) and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

(c)	In case any such mutilated, destroyed, lost or stolen Security or any coupon or coupons appertaining thereto has become or is
about to become due and	I payable, the Company in its discretion may, instead of issuing a new Security, pay such Security or any coupon or coupons
appertaining thereto.	

- (d) Upon the issuance of any new Security under this Section or any coupon or coupons appertaining thereto, 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.
- (e) Every new Security or any coupon or coupons appertaining thereto of any series issued pursuant to this Section in lieu of any destroyed, lost or stolen Security or any coupon or coupons appertaining thereto shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security or any coupon or coupons appertaining thereto is 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 or any coupon or coupons appertaining thereto of that series duly issued hereunder.
- (f) 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 any coupon or coupons appertaining thereto.

Section 3.07 <u>Payment of Interest; Interest Rights Preserved.</u>

- (a) Unless otherwise provided as contemplated by Section 301(b) with respect to the Securities of any series, 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 Registered Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest; *provided*, *however*, that interest payable at Maturity will be paid to the Person to whom principal is payable. In case an Unregistered 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 of the Company 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 Unregistered 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 Unregistered Security, but will be payable only to the Holder of such coupon when due in accordance with provisions of this Indenture.
- (b) 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 Holder 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 (i) or (ii) below:
- (i) 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, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 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 the address of such Holder as it appears in the Security Register, not less than 10 days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so mailed, 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 (ii). In case an Unregistered Security of any series is surrendered at the office or agency of the Company 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 Unregistered 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 Unregistered Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

- (ii) 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 securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause (ii), such manner of payment shall be deemed practicable by the Trustee.
- (c) Subject to the foregoing provisions of this Section, each Registered Security delivered under this Indenture upon registration of transfer of or in exchange for or in lieu of any other Registered Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Registered Security.
- (d) Subject to the limitations set forth in Section 1002, the Holder of any coupon appertaining to an Unregistered Security shall be entitled to receive the interest payable on such coupon upon presentation and surrender of such coupon on or after the Interest Payment Date of such coupon at an office or agency maintained for such purpose pursuant to Section 1002.

Section 3.08 <u>Persons Deemed Owners.</u>

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 Registered Security for the purpose of receiving payment of principal of (and any premium) and (subject to Section 301 and Section 307) any 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.

Ownership of Registered Securities of a series shall be proved by the computerized book-entry system of the Depositary in the case of Registered Securities issued in the form of a Global Security. Ownership of Unregistered Securities may be proved by the production of such Unregistered Securities or by a certificate or affidavit executed by the person holding such Unregistered Securities or by a depository with whom such Unregistered Securities were deposited, if the certificate or affidavit is satisfactory to the Trustee and the Company. The Company, the Trustee and any agent of the Company may treat the bearer of any Unregistered Security or coupon and the person in whose name a Registered Security is registered as the absolute owner thereof for all purposes.

None of the Company, the Trustee, any Paying Agent or the Security Registrar shall 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.

Section 3.09 Cancellation.

Except as otherwise specified as contemplated by Section 301(b) for Securities of any series, all Securities and coupons surrendered for payment, redemption, registration of transfer 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, if not theretofore cancelled, shall be promptly cancelled by it. Except as otherwise specified as contemplated by Section 301(b) for Securities of any series, the Company may at any time deliver to the Trustee for cancellation any Securities or coupons previously authenticated and delivered hereunder that the Company may have acquired in any manner whatsoever or that the Company has not issued and sold, and all Securities or coupons so delivered shall be promptly cancelled by the Trustee. No Securities or coupons shall be authenticated in lieu of or in exchange for any Securities or coupons cancelled as provided in this Section, except as expressly permitted by this Indenture. All cancelled Securities or coupons held by the Trustee shall be destroyed and the Trustee shall furnish an affidavit to the Company (setting forth the serial numbers of such Securities) attesting to such destruction unless by a Company Order the Company shall direct that the cancelled Securities or coupons be returned to it.

Section 3.10 <u>Computation of Interest.</u>

Except as otherwise specified as contemplated by Section 301(b) for Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year of twelve 30-day months.

Section 3.11 <u>Global Securities; Exchanges; Registration and Registration of Transfer.</u>

If specified as contemplated by Section 301(b) for Securities of any series, the Securities of such series may be issued in the form of one or more Global Securities, which shall be deposited with the Depositary, and, unless otherwise specified in the form of Global Security adopted pursuant to Section 301, be registered in the name of the Depository's nominee.

Except as otherwise specified as contemplated by Section 301(b) for Securities of any series, any permanent Global Security shall be exchangeable only as provided in this paragraph. If the beneficial owners of interests in a permanent Global Security are entitled to exchange such interests for Securities of such series of like tenor and principal amount of another authorized form, as specified as contemplated by Section 301(b), then without unnecessary delay but in any event not later than the earliest date on which such interests may be so exchanged, the Company shall deliver to the Trustee definitive Securities of that series in aggregate principal amount equal to the principal amount of such permanent Global Security, executed by the Company. On or after the earliest date on which such interests may be so exchanged, such permanent Global Security shall be surrendered from time to time in accordance with instructions given to the Trustee and the Depositary (which instructions shall be in writing but need not comply with Section 102 or be accompanied by an Opinion of Counsel) by the Depositary or such other depositary as shall be specified in the Company Order with respect thereto to the Trustee, as the Company's agent for such purpose, to be exchanged, in whole or in part, for definitive Securities of the same series without charge and the Trustee shall authenticate and deliver, in exchange for each portion of such permanent Global Security, a like aggregate principal amount of definitive Securities of the same series of authorized denominations and of like tenor as the portion of such permanent Global Security to be exchanged which, unless the Securities of the series are not issuable both as Unregistered Securities and as Registered Securities, as specified by Section 301(b), shall be in the form of Unregistered Securities or Registered Securities, or any combination thereof, as shall be specified by the beneficial owner thereof; provided, however, that no such exchanges may occur during the periods specifi

permanent Global Security shall be mailed or otherwise delivered to any location in the United States unless the Company has complied with Section 305(d). Promptly following any such exchange in part, such permanent Global Security shall be returned by the Trustee, to the Depositary or such other depositary referred to above, in accordance with the instructions of the Company referred to above.

The Global Security may be transferred to another nominee of the Depositary, or to a successor Depositary selected by the Company, and upon surrender for registration of transfer of the Global Security to the Trustee, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee, a new Global Security in the same aggregate principal amount. If at any time the Depositary notifies the Company that it is unwilling or unable to continue as Depositary and a successor Depositary satisfactory to the Company is not appointed within 90 days after the Company receives such notice, the Company will execute, and the Trustee will authenticate and deliver, Securities in definitive form to the Depositary in exchange for the Global Security. In addition, if at any time the Company determines that it is not in the best interest of the Company or the beneficial owners of Securities to continue to have a Global Security representing all of the Securities held by a Depositary, the Company may, at its option, execute, and the Trustee will authenticate and deliver, Securities in definitive form to the Depositary in exchange for all or a portion of the Global Security. Promptly after any such exchange of Securities in definitive form for all or a portion of the Global Security pursuant to this paragraph, the Company shall promulgate regulations governing registration of transfers and exchanges of Securities in definitive form, which regulations shall be reasonably satisfactory to the Trustee and shall thereafter bind every Holder of such Securities.

Section 3.12 <u>Extension of Interest Payment.</u>

The Company shall have the right at any time, so long as the Company is not in default in the payment of interest on the Securities of any series hereunder, to extend interest payment periods on all Securities of one or more series, if so specified as contemplated by Section 301(b) with respect to such Securities and upon such terms as may be specified as contemplated by Section 301(b) with respect to such Securities. If the Company ever so extends any such interest payment period, the Company shall promptly notify the Trustee.

ARTICLE 4

SATISFACTION AND DISCHARGE; DEFEASANCE

Section 4.01 <u>Termination of Company's Obligations.</u>

(a) This Indenture shall upon Company Request cease to be of further effect with respect to the Securities of any series (except as to any surviving rights of registration of transfer or exchange of Securities herein expressly provided for), and the Trustee, at the expense of the Company, shall execute instruments in form and substance satisfactory to the Trustee and the Company acknowledging termination of the Company's obligations under the Securities of such series and this Indenture, when

(1) either

- (A) all Securities of such series previously authenticated and delivered (other than (i) Securities of such series that have been destroyed, lost or stolen and that have been replaced or paid as provided in Section 306 and (ii) Securities of such series that are deemed paid and discharged pursuant to Section 402) have been delivered to the Trustee for cancellation; or
 - (B) all such Securities of such series not previously delivered to the Trustee for cancellation
 - (i) have become due and payable (whether at Stated Maturity, early redemption or otherwise), or

(ii)	will become due a	nd navable at t	their Stated M	aturity within	one year or

(iii) 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 funds in trust solely for the benefit of the Holders of the Securities of such series an amount in cash in the currency or composite currency in which the Securities of such series are denominated, Eligible Obligations or any combination thereof, together (if necessary in the case of a series of Securities not bearing interest at a fixed rate) with any Hedging Obligation, so that such funds in each case are sufficient to pay principal of, and any premium and interest on, all Outstanding Securities of such series;

- (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 Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture have been complied with.
- (b) Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 607, the obligations of the Trustee to any Authenticating Agent under Section 614 and, if money has been deposited with the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 405 and Section 1003(e) shall survive.
- (c) Upon satisfaction and discharge of this Indenture as provided in this Section 401, the Trustee shall assign, transfer and turn over to the Company, subject to the claim provided by Section 607, any and all money, securities and other property then held by the Trustee for the benefit of the Holders of the Securities.

The Company may elect, at its option at any time, to have Section 402 or Section 403 applied to the Outstanding Securities of any series in accordance with any applicable requirements provided pursuant to Section 301 and upon compliance with the conditions set forth below in this Article. Any such election shall be evidenced by a Board Resolution or in another manner specified as contemplated by Section 301(b) for such Securities.

Section 4.02 <u>Defeasance and Discharge of Indenture.</u>

Upon the Company's exercise of its option (if any) to have this Section applied to all the Outstanding Securities of any series or Tranche, or any portion of the principal amount thereof, and subject to the conditions set forth in Section 404 being satisfied, the Company shall be deemed to have paid and discharged the entire indebtedness on such Outstanding Securities of such series or Tranche on the 91st day after the date of the deposit referred to in subparagraph (i) of Section 404, and the provisions of this Indenture, as it relates to such Outstanding Securities of such series or Tranche, shall be satisfied and discharged and shall no longer be in effect (and the Trustee, at the expense of the Company, shall at Company Request execute proper instruments acknowledging the same), except as to:

(a) the rights of Holders of Securities of such series to receive, solely from the trust funds described in Section 405, (x) payment of the principal of (and premium, if any) and each installment of principal of (and premium, if any) or interest, if any, on the Outstanding Securities of such series, or portions thereof, on the Stated Maturity of such principal or installment of principal or interest to and including the Redemption Date designated by the Company pursuant to subparagraph (viii) of Section 404 and (y) the

benefit of any mandatory sinking fund payments applicable to the Securities of such series or Tranche on the day on which such payments are due and payable in accordance with the terms of this Indenture and the Securities of such series or Tranche;

- (b) the obligations of the Company and the Trustee with respect to such Securities of such series or Tranche under Sections 304, 305, 306, 614, 1002 and 1003 and, if the Company shall have designated a Redemption Date pursuant to subparagraph (x) of Section 404, Sections 1104 and 1106; and
 - (c) the Company's obligations with respect to the Trustee under Section 607.

Section 4.03 <u>Defeasance of Certain Obligations.</u>

The Company may omit to comply with its obligations under the covenants contained in Sections 801, 1006 and 1007 with respect to any Security or Securities of any series (and in respect of any term, provision or condition set forth in the covenants or restrictions specified for such Securities pursuant to Section 301(b), in any supplemental indenture, Board Resolution or Officer's Certificate establishing such Security), and the failure to comply with any such provisions shall not constitute a Default or Event of Default under Section 501(4), *provided* that the conditions set forth in Section 404 have been satisfied.

Section 4.04 <u>Conditions to Defeasance.</u>

The following conditions shall be the conditions to the application of Section 402 and Section 403:

- the Company has deposited or caused to be deposited irrevocably with the Trustee as trust funds in trust, specifically pledged as security for, and dedicated solely to, the benefit of the Holders of the Securities of such series, (x) cash in Dollars (or such other currency or composite currency in which such Securities are denominated) in an amount sufficient, or (y) Eligible Obligations which through the payment of interest and principal in respect thereof in accordance with their terms will provide on or before the due date of any payment referred to in clause (1) or (2) of this subparagraph (i) money in an amount sufficient or (z) a combination of such cash and Eligible Obligations, together (if necessary in the case of a series of Securities not bearing interest at a fixed rate) with any Hedging Obligation so that such funds are sufficient, in the opinion of a nationally recognized firm of independent certified public accountants expressed in a written certification thereof delivered to the Trustee, to pay and discharge (1) the principal of (and premium, if any) and each installment of principal (and premium, if any) and interest, if any, on such Securities on the Stated Maturity of such principal or installment of principal or interest or to and including the Redemption Date designated by the Company in accordance with Section 404(a)(1)(B)(iii) and (2) any mandatory sinking fund payments applicable to the Securities of such series on the day on which such payments are due and payable in accordance with the terms of this Indenture and of the Securities of such series;
- (ii) in the event of an election to have Section 402 apply, the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that (x) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (y) there has been a change in law or regulation occurring after the date hereof, to the effect that Holders of the Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount and in the same manner and at the same times, as would have been the case if such deposit, defeasance and discharge had not occurred;
- (iii) in the event of an election to have Section 403 apply, the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that Holders of the Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such deposit and defeasance and will be subject to federal income tax on the same amount and in the same manner and at the same times, as would have been the case if such deposit and defeasance had not occurred;

- (iv) such deposit will not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound;
- (v) such provision would not cause any Outstanding Securities of such series then listed on a securities exchange to be delisted as a result thereof;
- (vi) no Event of Default or event that with notice or lapse of time would become an Event of Default with respect to the Securities of such series has occurred and is continuing on the date of such deposit or during the period ending on the 91st day after such date;
- (vii) the Company has delivered to the Trustee an Officer's Certificate stating that the deposit was not made by the Company with the intent of preferring the holders of the Securities of such series over any other creditors of the Company or with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company;
- (viii) such deposit shall not, as specified in an Opinion of Counsel, cause the Trustee with respect to the Securities of such series to have a conflicting interest as defined in Section 608 and for purposes of the Trust Indenture Act with respect to the Securities of such series;
- (ix) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for relating to the defeasance contemplated by this Section have been complied with; and
- (x) if the Company has deposited or caused to be deposited money or Eligible Obligations to pay or discharge the principal of (and premium, if any) and interest on the Outstanding Securities of a series to and including a Redemption Date pursuant to clause (i) of this Section 404, such Redemption Date shall be irrevocably designated by a Board Resolution delivered to the Trustee on or prior to the date of deposit of such money or Eligible Obligations, and such Board Resolution shall be accompanied by an irrevocable Company Request that the Trustee give notice of such redemption in the name and at the expense of the Company not less than 30 nor more than 60 days prior to such Redemption Date in accordance with Section 1104.

Section 4.05 <u>Application of Trust Money.</u>

Neither the Eligible Obligations nor the funds deposited with the Trustee pursuant to Sections 401, 402 or 403, nor the principal or interest payments on any such Eligible Obligations, shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of and premium, if any, and interest, if any, on the Securities or portions of principal amount thereof in respect of which such deposit was made, all subject, however, to the provisions of Section 606; *provided*, *however*, that, so long as no Event of Default has occurred and is continuing, any cash received from such principal or interest payments on such Eligible Obligations deposited with the Trustee, if not then needed for such purpose, shall, to the extent practicable, be invested in Eligible Obligations of the type described in Sections 401 and 402(d)(2)(A) maturing at such times and in such amounts as shall be sufficient to pay when due the principal of and any premium and interest due and to become due on such Securities or portions thereof on and prior to the Maturity thereof, and interest earned from such reinvestment shall be paid over to the Company as received by the Trustee, free and clear of any trust, lien or pledge under this Indenture except the claim provided by Section 607; and *provided*, *further*, that, so long as there shall not have occurred and be continuing an Event of Default, any moneys held by the Trustee in accordance with this Section on the Maturity of all such Securities in excess of the amount required to pay the principal of and premium, if any, and interest, if any, then due on such Securities shall be paid over to the Company free and clear of any trust, lien or pledge under this Indenture except the claim provided by Section 607.

- (b) The Company shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against Eligible Obligations deposited pursuant to Section 401, 402 or 403 or the principal and any premium and interest received in respect of such obligations other than any payable by or on behalf of Holders.
- (c) The Trustee shall deliver or pay to the Company from time to time upon Company Request any Eligible Obligations or money held by it as provided in Section 401, 402 or 403 that, in the opinion of a nationally recognized firm of independent certified public accountants expressed in a written certification thereof delivered to the Trustee, are then in excess of the amount thereof that then would have been required to be deposited for the purpose for which such Eligible Obligations or money was deposited or received. This provision shall not authorize the sale by the Trustee of any Eligible Obligations held under this Indenture.

Section 4.06 Reinstatement.

If the Trustee or the Paying Agent is unable to apply any money in accordance with this Article with respect to any Securities by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the obligations under this Indenture and such Securities from which the Company has been discharged or released pursuant to Section 402 or Section 403 shall be revived and reinstated as though no deposit had occurred pursuant to this Article with respect to such Securities, until such time as the Trustee or Paying Agent is permitted to apply all money held in trust pursuant to Section 405 with respect to such Securities in accordance with this Article; *provided*, *however*, that if the Company makes any payment of principal of or any premium or interest on any such Security following such reinstatement of its obligations, the Company shall be subrogated to the rights (if any) of the Holders of such Securities to receive such payment from the money so held in trust.

ARTICLE 5

REMEDIES

Section 5.01 <u>Events of Default.</u>

"Event of Default", wherever used herein with respect to Securities of any series, means any one of the following events, unless such event is either inapplicable to a particular series or it is specifically deleted or modified in the applicable Board Resolution or supplemental indenture under which such series of Securities is issued, as the case may be, as contemplated by Section 301:

- (1) default in the payment of any interest upon any Security of that series when it becomes due and payable, and continuance of such default for a period of 30 days; *provided*, *however*, that a valid extension of the interest payment period by the Company as contemplated in Section 312 shall not constitute a failure to pay interest for this purpose; or
- (2) default in the payment of the principal of (or premium, if any, on) any Security of that series at its Maturity and, in the case of technical or administrative difficulties, only if such default persists for a period of more than three Business Days; or
- (3) default in the deposit of any sinking fund payment, when and as due by the terms of a Security of that series and continuance of such default for a period of 30 days; or
- (4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture (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 one or more series of Securities other than that series), and continuance of such default or breach for a period of 90 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 aggregate principal amount of the Outstanding Securities of such 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) the entry by a court having jurisdiction in the premises of (A) a decree or order for relief in respect of the Company in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or (B) a decree or order adjudging the Company a bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Company under any applicable federal or state law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 90 consecutive days; or
- the commencement by the Company of a voluntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree or order for relief in respect of the Company in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal or state law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or similar official of the Company or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the admission by it in writing of its inability to pay its debts generally as they become due, or the taking of corporate action by the Company in furtherance of any such action; or
 - (7) any other Event of Default provided with respect to Securities of such series pursuant to Section 301(b).

Section 5.02 <u>Acceleration of Maturity; Rescission and Annulment.</u>

If an Event of Default with respect to Securities of any series at the time Outstanding occurs and is continuing, then in every such case the Trustee or the Holders of not less than 25% in aggregate principal amount of the Outstanding Securities of such series, by a notice in writing to the Company (and to the Trustee if given by such Holders), may declare the principal amount (or, if the Securities of such series are Original Issue Discount Securities or Indexed Securities, such portion of the principal amount of such Securities as may be specified in the terms thereof) to be due and payable immediately and upon any such declaration such principal amount (or specified amount) shall become immediately due and payable. If an Event of Default specified in Section 501(5) or (6) occurs, the principal of all the Securities then Outstanding (or if any such Securities are Original Issue Discount Securities or Indexed Securities, such portion of the principal amount of such Securities as may be specified in the terms thereof) shall automatically become and be immediately due and payable without any declaration or other act or notice on the part of the Trustee or any Holders of the Securities.

At any time after such a declaration of acceleration with respect to Securities of one or more 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 Event or Events of Default giving rise to such declaration of acceleration shall, without further act, be deemed to have been waived, and such declaration and its consequences shall, without further act, be deemed to have been rescinded and annulled, if

(1) the Company has paid or deposited irrevocably with the Trustee a sum sufficient to pay

- (A) all overdue interest on all Securities of any such series,
- (B) the principal of (and premium, if any, on) any Securities of such series that have become due otherwise than by such declaration of acceleration and interest thereon at the rate or rates prescribed therefor in such Securities,
- (C) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates borne by such Securities, unless another rate is provided in such Securities, and
 - (D) all amounts due to the Trustee under Section 607;

and

(2) all Events of Default with respect to Securities of that series, other than the non-payment of the principal of Securities of that series that 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 Event of Default or impair any right consequent thereon.

Section 5.03 <u>Collection of Indebtedness and Suits for Enforcement by Trustee.</u>

If an Event of Default described in clause (1) or (2) of Section 501 has occurred and is continuing, the Company shall, upon demand of the Trustee, pay to the Trustee, for the benefit of the Holders of the Securities of the series with respect to which such Event of Default has occurred, the whole amount then due and payable on such Securities for principal and any premium or interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and premium and on any overdue interest, at the rate or rates borne by such Securities, unless another rate is provided in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover any amounts due to the Trustee under Section 607.

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 by such appropriate judicial proceedings as the Trustee deems most effectual 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 5.04 <u>Trustee May File Proofs of Claim.</u>

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 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 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 of principal and premium or 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 amounts due to the Trustee under Section 607) 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 to make such payments to the Trustee and, if the Trustee consents to the making of such payments directly to the Holders, to pay to the Trustee any amount due it under Section 607.

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

Section 5.05 Trustee May Enforce Claims Without Possession of Securities or Coupons.

All rights of action and claims under this Indenture or 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 amounts due to the Trustee under Section 607, be for the ratable benefit of the Holders of the Securities and coupons in respect of which such judgment has been recovered.

Section 5.06 <u>Application of Money Collected.</u>

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 and any premium and interest, upon presentation of the Securities in respect of which or for the benefit of which such money shall have been collected 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 under Section 607;

SECOND: To the payment of the amounts then due and unpaid for principal of and any premium and interest on the Securities 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 amounts due and payable on such Securities for principal and any premium and interest, respectively; and

THIRD: The balance, if any, to the Company.

The Trustee may fix a record date (with respect to Registered Securities) and payment date for any such payment to Holders of Securities.

Section 5.07 <u>Limitation on Suits.</u>

No Holder of any Security of any series 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;

- the Holders of not less than 25% in aggregate 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 against the reasonable 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 aggregate 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 of such Holders.

Section 5.08 Unconditional Right of Holders to Receive Principal, Premium and Interest.

Notwithstanding any other provision in this Indenture, the Holder of any Security shall have the right, which is absolute and unconditional, to receive payment of the principal of and premium and (subject to Section 307) interest on such Security on the Stated Maturity or Maturities expressed in such Security (or, in the case of redemption, on the Redemption Date, or, in the case of repayment at the option of the Holder, on the Repayment 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 5.09 <u>Restoration of Rights and Remedies.</u>

If the Trustee or any Holder 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, subject to any determination in such proceeding, the Company, the Trustee and such Holder shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and such Holder shall continue as though no such proceeding had been instituted.

Section 5.10 <u>Rights and Remedies Cumulative</u>.

Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in the last paragraph of Section 306, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders 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 5.11 Delay or Omission Not Waiver.

No delay or omission of the Trustee or of any Holder of any Securities 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, as the case may be.

Section 5.12 <u>Control by Holders.</u>

If an Event of Default shall have occurred and be continuing in respect of a series of Securities, the Holders of a majority in aggregate principal amount of the Outstanding Securities of that 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 or Tranche; *provided*, *however*, that if an Event of Default has occurred and is continuing with respect to more than one series of Securities of equal ranking, the Holders of a majority in aggregate principal amount of the Outstanding Securities of all such series of equal ranking, considered as one class, shall have the right to make such direction, and not the Holders of the Securities of any one of such series of equal ranking; *provided*, *further* that

- (1) such direction shall not be in conflict with any rule of law or with this Indenture, and
- (2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

Section 5.13 Waiver of Past Defaults.

The Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series waive any past default hereunder with respect to such series and its consequences; provided that if any such past default has occurred with respect to more than one series of Securities of equal ranking, the Holders of a majority in aggregate principal amount of the Outstanding Securities of all such series of equal ranking, considered as one class, may make such waiver, and not the Holders of the Securities of any one of such series of equal ranking, in each case, except a default

- (1) in the payment of the principal of or premium or interest on any Security of such series, or
- in respect of a covenant or provision hereof that under Section 902 cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected.

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 impair any right consequent thereon.

Section 5.14 <u>Undertaking for Costs.</u>

All parties to this Indenture agree, and each Holder of any Security by such Holder's acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken, suffered 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, 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 Company, 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 aggregate principal amount of the Outstanding Securities of all series in respect of which such suit may be brought, considered as one class, or to any suit instituted by any Holder for the enforcement of the payment of the principal of or any premium or interest on

any Security on or after the Stated Maturity or Maturities expressed in such Security (or, in the case of redemption, on or after the Redemption Date, or, in the case of repayment at the option of the Holder, on or after the Repayment Date).

Section 5.15 <u>Waiver of Stay or Extension Laws.</u>

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 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.

ARTICLE 6

THE TRUSTEE

Section 6.01 <u>Certain Duties and Responsibilities.</u>

- (a) Except during the continuance of an Event of Default with respect to Securities of any series,
- (1) the Trustee undertakes to perform, with respect to Securities of such series, 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
- in the absence of bad faith on its part, the Trustee may, with respect to Securities of such series, 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.
- (b) If an Event of Default with respect to Securities of any series has occurred and is continuing, the Trustee shall exercise, with respect to Securities of such series, 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 sub-section (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 aggregate principal amount of the Outstanding Securities of any one or more series, as provided herein, 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 has reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.
- (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.

Section 6.02 <u>Notice of Defaults.</u>

Within 90 days after the occurrence of any default hereunder with respect to the Securities of any series, the Trustee shall transmit by mail to all Holders of Securities of such series entitled to receive reports pursuant to Section 704(3) (and, if Unregistered Securities of that series are outstanding, shall cause to be published at least once in an Authorized Newspaper in The City of New York and, if Securities of that series are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located) 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 any premium or interest on any Security of such series or in the payment of any sinking fund installment with respect to 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 or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interest of the Holders of Securities of such series; and *provided*, *further*, that in the case of any default of the character specified in Section 501(4) with respect to Securities of such series, no such notice to Holders shall be given until at least 75 days after the occurrence thereof. For the purpose of this Section, the term "default" means any event that is, or after notice or lapse of time or both would become, an Event of Default with respect to Securities of such series.

Section 6.03 <u>Certain Rights of Trustee</u>.

Subject to the provisions of Section 601 and to the applicable provisions of the Trust Indenture Act:

- (a) the Trustee may rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties;
- (b) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order, or as otherwise expressly provided herein, and any resolution of the Board of Directors may be sufficiently evidenced by a Board Resolution;
- (c) 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 Officer's Certificate and such Officer's Certificate, in the absence of negligence or bad faith on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted by it under the provisions of this Indenture upon the faith thereof;

- (d) the Trustee may consult with counsel 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;
- (e) 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 pursuant to this Indenture, unless such Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction;
- (f) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit; and
- (g) 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.

Section 6.04 Not Responsible for Recitals or Issuance of Securities.

The recitals contained herein and in the Securities, except the Trustee's certificate of authentication, shall be taken as the statements of the Company, and the Trustee or any Authenticating Agent assumes no responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities of any series or any coupons. The Trustee or any Authenticating Agent shall not be accountable for the use or application by the Company of Securities or the proceeds thereof. The Trustee shall not be responsible for and makes no representations as to the Company's ability or authority to issue the Unregistered Securities or the lawfulness thereof.

Section 6.05 <u>May Hold Securities.</u>

The Trustee, any Authenticating Agent, any Paying Agent, any Security Registrar or any other agent of the Company or the Trustee, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Sections 608 and 613, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

Section 6.06 Money Held in Trust.

Money held by the Trustee or by any Paying Agent (other than the Company if the Company shall act as Paying Agent) in trust hereunder need not be segregated from other funds except to the extent required by law. Neither the Trustee nor any Paying Agent shall be liable for interest on any money received by it hereunder except as expressly provided herein or otherwise agreed with the Company.

Section 6.07 <u>Compensation and Reimbursement.</u>

The Company agrees

- (1) to pay to the Trustee 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 the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the expenses and

disbursements of its agents and counsel), except any such expense, disbursement or advance as may be attributable to its negligence, willful misconduct or bad faith; and

(3) to indemnify the Trustee for, and to hold it harmless against, any loss, liability or expense reasonably 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 or performance of its duties 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.

As security for the performance of the obligations of the Company under this Section, the Trustee shall have a claim prior to the Securities and any coupons upon all property and funds held or collected by the Trustee as such, except property and funds held in trust for the payment of principal of and any premium and interest on particular Securities or any coupons.

Section 6.08 <u>Disqualification; Conflicting Interests.</u>

If the Trustee has or acquires any conflicting interest within the meaning of the Trust Indenture Act with respect to the Securities of any series, it shall either eliminate such conflicting interest or resign to the extent, in the manner and with the effect, and subject to the conditions, provided in the Trust Indenture Act and this Indenture. For purposes of Section 310(b)(1) of the Trust Indenture Act and to the extent permitted thereby, the Trustee, in its capacity as trustee in respect of the equally ranked and unsecured Securities of any series, shall not be deemed to have a conflicting interest arising from its capacity as trustee in respect of the equally ranked and unsecured Securities of any other series under this Indenture.

Section 6.09 <u>Corporate Trustee Required; Eligibility.</u>

There shall at all times be a Trustee hereunder that shall be a Person that is eligible pursuant to the Trust Indenture Act to act as such, having a combined capital and surplus of at least \$50,000,000, subject to supervision or examination by federal or state authority and qualified and eligible under this Article, provided that, neither the Company nor any Affiliate of the Company or any obligor on the Securities may serve as Trustee of any Securities. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Trustee ceases 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.

Section 6.10 <u>Resignation and Removal; Appointment of Successor.</u>

- (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 611.
- (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 the instrument of acceptance by a successor Trustee required by Section 611 has not been delivered to the Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.
 - (c) The Company may at any time by a Board Resolution remove the Trustee with respect to the Securities of any or all series.

- (d) 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 aggregate principal amount of the Outstanding Securities of such series, delivered to the Trustee and to the Company.
 - (e) If at any time:
- (1) the Trustee fails to comply with Section 608 with respect to the Securities of any series, after written request therefor by the Company or by any Holder who has been a bona fide Holder of a Security of such series for at least six months, or
- the Trustee ceases to be eligible under Section 609 and fails to resign after written request therefor by the Company or by any such Holder, or
- (3) the Trustee becomes incapable of acting or becomes adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property is appointed or any public officer takes 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, subject to Section 514, any Holder 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.

- (f) If the Trustee resigns, is removed or becomes 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 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) and shall comply with the applicable requirements of Section 611. 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 is appointed by Act of the Holders of a majority in aggregate 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 in accordance with the applicable requirements of Section 611, 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 has been so appointed by the Company or the Holders and accepted appointment in the manner required by Section 611, any Holder who has been a bona fide Holder of a Security of such series for at least six months may, subject to Section 514, 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 the Securities of such series.
- (g) 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 by mailing written notice of such event by first-class mail, postage prepaid, to all Holders of Securities of such series entitled to receive reports pursuant to Section 704(3) and, if any Unregistered Securities are outstanding, by publishing notice of such event once in an Authorized Newspaper in The City of New York and, if any Unregistered Securities are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located. 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.
- (h) All provisions of this Section except subparagraph (d) and Section 611(b) (except for the last clause, after omitting the words "after deducting all amounts owed to the retiring Trustee pursuant to

Section 607," which shall apply) shall apply also to any Paying Agent located outside the United States and its possessions.

Section 6.11 <u>Acceptance of Appointment by Successor.</u>

- In case of the appointment hereunder of a successor Trustee with respect to the Securities of all series, 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 the 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.
- (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 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, all property and money
- (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, 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 6.12 <u>Merger, Conversion, Consolidation or Succession to Business.</u>

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 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 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 so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities. In case any Securities shall not have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities, 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 6.13 <u>Preferential Collection of Claims Against Company.</u>

The Trustee shall comply with Trust Indenture Act § 311(a), excluding any creditor relationship listed in Trust Indenture Act § 311(b). A Trustee who has resigned or been removed shall be subject to Trust Indenture Act § 311(a) to the extent indicated therein.

Section 6.14 <u>Appointment of Authenticating Agent.</u>

- At any time when any of the Securities remain Outstanding the Trustee may appoint an Authenticating Agent or Agents (which (a) may include any Person that owns, directly or indirectly, all of the capital stock of the Trustee or a corporation that is a wholly-owned subsidiary of the Trustee or of such other Person) with respect to one or more series of Securities, or any Tranche thereof, that shall be authorized to act on behalf of the Trustee to authenticate Securities of such series or Tranche issued upon original issuance, exchange, registration of transfer or partial redemption thereof or pursuant to Section 306, 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. If any Unregistered Securities are outstanding, the Trustee shall publish notice of such event once in an Authorized Newspaper in The City of New York and, if any Unregistered Securities are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located. 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 corporation organized and doing business under the laws of the United States of America, any state thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by federal or state authority in the United States. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this 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. If at any time an Authenticating Agent ceases 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.
- (b) 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 any further act on the part of the Trustee or the Authenticating Agent.
- (c) An Authenticating Agent may resign with respect to one or more series of Securities at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent with respect to one or more series of Securities by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent ceases to be eligible in accordance with the provisions of this Section, the Trustee may appoint a successor Authenticating Agent

that is acceptable to the Company and shall provide notice of such appointment to all Holders of Securities of the series or Tranche with
respect to which such Authenticating Agent will serve, as provided in paragraph (a) of this Section. Any successor Authenticating Agent upon acceptance of
its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an
Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section. An Authenticating Agent
appointed pursuant to this Section shall be entitled to rely on Sections 111, 308, 604 and 605 hereunder.

- (d) The Trustee agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section, and the Trustee shall be entitled to be reimbursed for such payments, subject to the provisions of Section 607.
- (e) If an appointment with respect to the Securities of one or more series, or any Tranche thereof, is made pursuant to this Section, the Securities of such series or Tranche may have endorsed thereon, in addition to the Trustee's certificate of authentication, an alternate certificate of authentication in the following form:

This is one of the Securities of the series designated pursuant to and issued under the within-mentioned Indenture.

[]
As Trustee

By:
As Authenticating Agent on behalf of the Trustee

By:

Authorized Officer of Authenticating Agent

Date:

(f) If all of the Securities of a series may not be originally issued at one time, and if the Trustee does not have an office capable of authenticating Securities upon original issuance located in a Place of Payment where the Company wishes to have Securities of such series authenticated upon original issuance, the Trustee, if so requested by the Company in writing (which writing need not comply with Section 102 and need not be accompanied by an Opinion of Counsel), shall appoint, in accordance with this Section and in accordance with such procedures as shall be acceptable to the Trustee, an Authenticating Agent (which, if so requested by the Company, may be an Affiliate of the Company) having an office in a Place of Payment designated by the Company with respect to such series of Securities.

ARTICLE 7

HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

Section 7.01 <u>Company to Furnish Trustee Names and Addresses of Holders.</u>

The Company will furnish or cause to be furnished to the Trustee

(a) semi-annually, not later than the 15th day after each Regular Record Date for each series of Registered Securities at the time Outstanding or on June 30 and December 31 of each year with

respect to each series of Securities for which there are no Regular Record Dates, a list, in such form as the Trustee may reasonably require, containing all the information in the possession or control of the Company, or any of its Paying Agents other than the Trustee, of the names and addresses of the Holders of Registered Securities of such series, including Holders of interests in Global Securities, as of such preceding Regular Record Date or on June 15 or December 15, as the case may be, or, in the case of a series of non-interest bearing Securities, on a date to be determined as contemplated pursuant to Section 301(b), 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;

excluding from any such list names and addresses received by the Trustee in its capacity as Security Registrar for Registered Securities other than Global Securities.

Section 7.02 <u>Preservation of Information; Communications to Holders.</u>

- (a) The Trustee shall preserve, in as current a form as is reasonably practicable, the names and addresses of Holders of Registered Securities contained in the most recent list furnished to the Trustee as provided in Section 701 and the names and addresses of Holders of Registered Securities received by the Trustee in its capacity as Security Registrar or Paying Agent. The Trustee may destroy any list furnished to it as provided in Section 701 upon receipt of a new list so furnished.
- (b) If three or more Holders (herein referred to as "applicants") apply in writing to the Trustee, and furnish to the Trustee reasonable proof that each such applicant has owned a Security for a period of at least six months preceding the date of such application, and such application states that the applicants desire to communicate with other Holders with respect to their rights under this Indenture or under the Securities and is accompanied by a copy of the form of proxy or other communication that such applicants propose to transmit, then the Trustee shall, within five business days after the receipt of such application, at its election, either
 - (i) afford such applicants access to the information preserved at the time by the Trustee in accordance with Section 702(a), or
- (ii) inform such applicants as to the approximate number of Holders whose names and addresses appear in the information preserved at the time by the Trustee in accordance with Section 702(a), and as to the approximate cost of mailing to such Holders the form of proxy or other communication, if any, specified in such application.

If the Trustee elects not to afford such applicants access to such information, the Trustee shall, upon the written request of such applicants, mail to each Holder whose name and address appear in the information preserved at the time by the Trustee in accordance with Section 702(a) a copy of the form of proxy or other communication that is specified in such request, with reasonable promptness after a tender to the Trustee by the applicants of the material to be mailed and of payment, or provision for the payment, of the reasonable expenses of mailing, unless within five days after such tender the Trustee shall mail to such applicants and file with the Commission, together with a copy of the material to be mailed, a written statement to the effect that, in the opinion of the Trustee, such mailing would be contrary to the best interest of the Holders or would be in violation of applicable law. Such written statement shall specify the basis of such opinion. If the Commission, after opportunity for a hearing upon the objections specified in the written statement so filed, enters an order refusing to sustain any of such objections or if, after the entry of an order sustaining one or more of such objections, the Commission finds, after notice and opportunity for hearing, that all the objections so sustained have been met and enters an order so declaring, the Trustee shall mail copies of such material to all such Holders with reasonable promptness after the entry of such order and the renewal of such tender by such

applicants; otherwise the Trustee shall be relieved of any obligation or duty to such applicants respecting their application.

(c) 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 agent of either of them shall be held accountable by reason of the disclosure of any such information as to the names and addresses of the Holders in accordance with Section 702(b), 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 Section 702(b).

Section 7.03 Reports by Trustee.

- (a) The Trustee shall transmit to Holders such reports concerning the Trustee the Trustee and its actions under this Indenture as may be required pursuant to the Trust Indenture Act at the times and in the manner provided pursuant thereto.
- (b) Reports so required to be transmitted at stated intervals of not more than 12 months shall be transmitted no later than July 1 in each calendar year, commencing with the first July 1 after the first issuance of Securities pursuant to this Indenture.
- (c) A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each securities exchange upon which any Securities are listed, with the Commission and with the Company. The Company will notify the Trustee in writing when any Securities are listed on any securities exchange.

Section 7.04 Reports by Company.

The Company shall:

- file with the Trustee, within 15 days after the Company files 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) that the Company may be required to file with the Commission pursuant to Section 13 or Section 15(d) of the U.S. Securities Exchange Act of 1934; or, if the Company is not required to file information, documents or reports pursuant to either of said Sections, then it shall 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 that may be required pursuant to Section 13 of the U.S. Securities Exchange Act of 1934 in respect of a security listed and registered on a 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 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; and
- (3) transmit by mail to all Holders of Registered Securities, as their names and addresses appear in the Security Register, to such Holders of Unregistered Securities as have, within the two years preceding such transmission, filed their names and addresses with the Trustee for that purpose and to each Holder whose name and address is then preserved on the Trustee's list pursuant to the first sentence of Section 702(a), within 30 days after the filing thereof with the Trustee, 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.

ARTICLE 8

CONSOLIDATION, MERGER, CONVEYANCE OR TRANSFER

Section 8.01 <u>Company May Consolidate, Etc. Only on Certain Terms.</u>

The Company shall not consolidate with or merge with or into, or convey, transfer or lease all or substantially all of its properties and assets to any Person, unless:

- either (x) the Company shall be the continuing corporation or the successor corporation or (y) the Person formed by such consolidation or into which the Company is merged or the Person that acquires by conveyance, transfer or lease the properties and assets of the Company substantially as an entirety shall be a Person organized and existing under the laws of the United States of America, any State thereof or the District of Columbia and shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, the due and punctual payment of the principal of and any premium and interest on all the Outstanding Securities and the performance of every covenant of this Indenture on the part of the Company to be performed or observed;
- (2) immediately after giving effect to such transaction, no Event of Default and no event that, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and
- (3) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and such supplemental indenture comply with this Article and that all conditions precedent herein provided for relating to such transaction have been met.

Section 8.02 <u>Successor Substituted for the Company.</u>

Upon any consolidation or merger or any conveyance, transfer or lease of all or substantially all the properties and assets of the Company in accordance with Section 801, the successor Person formed by such consolidation or into which the Company is merged or to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein and thereafter, in the case of a conveyance, transfer or lease of properties and assets of the Company substantially as an entirety, such conveyance, transfer or lease shall have the effect of releasing the Person named as the "Company" in the first paragraph of this instrument or any successor Person that shall theretofore have become such in the manner prescribed in this Article from its liability as obligor and maker on any of the Securities.

ARTICLE 9

SUPPLEMENTAL INDENTURES

Section 9.01 <u>Supplemental Indentures Without Consent of Holders.</u>

Without the consent of any Holders, the Company and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any 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 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 with respect to all or any series of Securities Outstanding hereunder; or
- (4) to add to or change any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the issuance of Securities in bearer form, registrable or not registrable as to principal, and with or without interest coupons; or
- (5) to change or eliminate any of the provisions of this Indenture, or to add any new provision to this Indenture, in respect of one or more series of Securities; *provided*, *however*, that any such change, elimination or addition (A) shall neither (i) apply to any Security Outstanding on the date of such indenture supplemental hereto nor (ii) modify the rights of the Holder of any such Security Outstanding with respect to such provision in effect prior to the date of such indenture supplemental hereto or (B) shall become effective only when no Security of such series remains Outstanding; or
 - (6) to add guarantees or collateral security with respect to the Securities of any series; or
- (7) to establish for the issuance of and establish the form or terms and conditions of Securities of any series or Tranche thereof as permitted by Section 301(b), and to establish the form of any certificates required to be furnished pursuant to the terms of this Indenture or any series of Securities; or
 - (8) to provide for uncertificated Securities in addition to or in place of all, or any series or Tranche of, certificated Securities; or
- (9) to evidence and provide for the acceptance of appointment hereunder by a separate or successor Trustee or co-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, pursuant to the requirements of Section 611(b); or
- (10) to change any place or places where (a) the principal of or premium, if any, or interest, if any, on all or any series of Securities, or any Tranche thereof, shall be payable, (b) all or any series of Securities, or any Tranche thereof, may be surrendered for registration or transfer, (c) all or any series of Securities, or any Tranche thereof, may be surrendered for exchange and (d) notices and demands to or upon the Company in respect of all or any series of Securities, or any Tranche thereof, and this Indenture may be served;
- (11) 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, or any Tranche thereof, pursuant to Article Four, provided that any such action shall not adversely affect the interests of the Holders of Securities of such series or Tranche or any other series of Securities in any material respect;
- (12) (i) to cure any ambiguity or to correct or supplement any provision contained herein or in any supplemental indenture that may be defective or inconsistent with any other provision contained herein or in any supplemental indenture or (ii) to conform the terms of any series of Securities, or Tranche thereof, to the description thereof in the prospectus and prospectus supplement (or similar offering document) offering such series of Securities, or Tranche thereof; or
- (13) to make any other provisions with respect to matters or questions arising under this Indenture, provided such action shall not adversely affect the interests of the Holders of any Securities of any series or Tranche Outstanding on the date of such indenture supplemental hereto.

Without limiting the generality of the foregoing, if the Trust Indenture Act as in effect at the date of the execution and delivery of this Indenture or at any time thereafter becomes amended and

- (x) if any such amendment requires one or more changes to any provisions hereof or the inclusion herein of any additional provisions, or by operation of law is deemed to effect such changes or incorporate such provisions by reference or otherwise, this Indenture shall be deemed to have been amended so as to conform to such amendment to the Trust Indenture Act, and the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to effect or evidence such changes or additional provisions; or
- (y) if any such amendment permits one or more changes to, or the elimination of, any provisions hereof that, at the date hereof or at any time thereafter, are required by the Trust Indenture Act to be contained herein (or if it is no longer required by the Trust Indenture Act for the Indenture to contain one or more provisions), this Indenture shall be deemed to have been amended to effect such changes or elimination, and the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to evidence such amendment hereof; or
- (z) if, by reason of any such amendment, it shall be no longer necessary for this Indenture to contain one or more provisions that, at the date of the execution and delivery hereof, are required by the Trust Indenture Act to be contained herein, the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to effect the elimination of such provisions.

Section 9.02 <u>Supplemental Indentures With Consent of Holders.</u>

- (a) Except as set forth in paragraph (b) below, with the consent of the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of each series affected (voting as one class) by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by a resolution of its Board of Directors (which resolution may provide general terms or parameters for such action and may provide that the specific terms of such action may be determined in accordance with or pursuant to a Company Order), and the Trustee may, from time to time and at any time, enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner the rights of the Holders of the Securities of each such series or of the Coupons appertaining to such Securities or of modifying in any manner the rights of the Holders of Securities of such series under this Indenture; *provided*, *however*, that if there are Securities of more than one series of equal ranking Outstanding hereunder and if a proposed supplemental indenture shall directly affect the rights of the Holders of Securities of one or more, but less than all, of such series, then the consent only of the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of all series so directly affected, considered as one class, shall be required.
 - (b) No such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby,
- change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Security, or reduce the principal amount or premium, if any, thereof or the rate of interest thereon (or the amount of any installment of interest thereon) or any premium payable upon the redemption thereof, or change the method of calculating the rate of interest thereon, 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 change the coin or currency (or other property) in which, any Security or any premium 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, on or after the Redemption Date, or, in the case of repayment at the option of the Holders, on or after the Repayment Date), or modify any provisions of this Indenture with respect to the conversion or exchange of the Securities

into Securities of another series or into any other debt or equity securities in a manner 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 of compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences provided for in this Indenture, or
- (3) modify any of the provisions of this Section, Section 513 or Section 1008, except to increase any such percentage or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby, *provided*, *however*, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to "the Trustee" and concomitant changes in this Section and Section 1008, or the deletion of this proviso, in accordance with the requirements of Sections 611(b) and 901(9).

A supplemental indenture that changes or eliminates any covenant or other provision of this Indenture that has expressly been included solely for the benefit of one or more particular series of Securities, or that 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.

It shall not be necessary for any Act of Holders under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof. A waiver by a Holder of such Holder's rights to consent under this Section shall be deemed to be a consent of such Holder.

Section 9.03 <u>Execution of Supplemental Indentures.</u>

In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 601) 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 that affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

Section 9.04 <u>Effect of Supplemental Indentures.</u>

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 shall be bound thereby. Any supplemental indenture permitted by this Article may restate this Indenture in its entirety, and, upon the execution and delivery thereof, any such restatement shall supersede this Indenture as theretofore in effect for all purposes.

Section 9.05 <u>Conformity With Trust Indenture Act.</u>

Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

Section 9.06 <u>Reference in Securities to Supplemental Indentures.</u>

Securities of any series, or any Tranche thereof, 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 so

determines, new Securities of any series, or any Tranche thereof, and any appertaining coupons 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 or Tranche and any appertaining coupons.

Section 9.07 Revocation and Effect of Consents.

Until an amendment or waiver becomes effective, a consent to it by a Holder of a Security is a continuing consent by the Holder and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent is not made on any Security. However, any such Holder or subsequent Holder may revoke the consent as to his Security or portion of a Security if the Trustee receives the notice of revocation before the date on which the Trustee receives an Officer's Certificate certifying that the Holders of the requisite principal amount of Securities have consented to the amendment or waiver. After an amendment or waiver becomes effective, it shall bind every Holder of each series of Securities affected by such amendment or waiver.

The Company may, but shall not be obligated to, fix a record date for the purpose of determining the Holders entitled to consent to any amendment or waiver. If a record date is fixed, then notwithstanding the provisions of the immediately preceding paragraph, those persons who were Holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to consent to such amendment or waiver or to revoke any consent previously given, whether or not such persons continue to be Holders after such record date.

After an amendment or waiver becomes effective it shall bind every Holder, unless it is of the type described in any of clauses (1) through (3) of Section 902(c). In such case, the amendment or waiver shall bind each Holder of a Security who has consented to it and every subsequent Holder of a Security that evidences the same debt as the consenting Holder's Security.

Section 9.08 <u>Modification Without Supplemental Indenture.</u>

If the terms of any particular series of Securities have been established in a Board Resolution or an Officer's Certificate as contemplated by Section 301, and not in an indenture supplemental hereto, additions to, changes in or the elimination of any of such terms may be effected by means of a supplemental Board Resolution or Officer's Certificate, as the case may be, delivered to, and accepted by, the Trustee; *provided*, *however*, that such supplemental Board Resolution or Officer's Certificate shall not be accepted by the Trustee or otherwise be effective unless all conditions set forth in this Indenture that would be required to be satisfied if such additions, changes or elimination were contained in a supplemental indenture shall have been appropriately satisfied. Upon the acceptance thereof by the Trustee, any such supplemental Board Resolution or Officer's Certificate shall be deemed to be a "supplemental indenture" for purposes of Sections 904 and 906.

ARTICLE 10

COVENANTS

Section 10.01

Payment of Principal, Premium and Interest.

(a) Subject to the following provisions, the Company will pay to the Trustee the amounts, in such coin or currency as is at the time legal tender for the payment of public or private debt, in the manner, at the times and for the purposes set forth herein and in the text of the Securities for each series, and the Company hereby authorizes and directs the Trustee from funds so paid to it to make or cause to be made payment of the principal of and any premium and interest on the Securities and coupons of each series as set forth herein and in the text of such Securities and coupons. Unless otherwise provided in the Securities of a series, the Trustee will arrange directly with any Paying Agents for the payment, or the Trustee will make

payment, from funds furnished by the Company, of the principal of and any premium and interest, on the Securities and coupons of each series by check or draft.

- (b) Unless otherwise provided in the Securities of a series, interest, if any, on Registered Securities of a series shall be paid by check or draft on each Interest Payment Date for such series to the Holder thereof at the close of business on the Regular Record Date specified in the Securities of such series; *provided*, *however*, that interest payable at Maturity will be paid to the Person to whom principal is payable. The Company may pay such interest by check or draft mailed to such Holder's address as it appears on the register for Securities of such series. Unless otherwise provided in the Securities of a series, principal of Registered Securities shall be payable by check or draft and only against presentation and surrender of such Registered Securities at the office of the Paying Agent, unless the Company shall have otherwise instructed the Trustee in writing.
- Unless otherwise provided in the Securities of a series, (i) interest, if any, on Unregistered Securities shall be paid by check or draft and only against presentation and surrender of the coupons for such interest installments as are evidenced thereby as they mature and (ii) original issue discount (as defined in Section 1273 of the Code), if any, on Unregistered Securities shall be paid by check or draft and only against presentation and surrender of such Securities, in either case at the office of a Paying Agent located outside of the United States and its possessions, unless the Company has otherwise instructed the Trustee in an Officer's Certificate. Unless otherwise provided in the Securities of a series, principal of and premium, if any, of Unregistered Securities shall be paid by check or draft and only against presentation and surrender of such Securities as provided in the Securities of a series. If at the time a payment of principal of and premium, if any, or interest, if any, or original issue discount, if any, on an Unregistered Security or coupon becomes due and the payment of the full amount so payable at the office or offices of all the Paying Agents outside the United States and its possessions is illegal or effectively precluded because of the imposition of exchange controls or other similar restrictions on the payment of such amount in United States currency, then the Company may instruct the Trustee in an Officer's Certificate to make such payments at the office of a Paying Agent located in the United States. The Company hereby covenants and agrees that it shall not so instruct the Trustee with respect to payment in the United States if such payment would cause such Unregistered Security to be treated as a "registration-required obligation" under United States law and regulations.
- (d) At the election of the Company, any payments by the Company provided for in this Indenture or in any of the Securities may be made by electronic funds transfer.

Section 10.02 <u>Maintenance of Office or Agency.</u>

(a) The Company will maintain in each Place of Payment for any series of Securities, or any Tranche thereof, an office or agency where Registered Securities, or any Tranche thereof, of that series may be surrendered for registration of transfer or exchange and a Place of Payment where (subject to Sections 305 and 307) Securities may be presented for payment 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. Unless otherwise specified pursuant to Section 301(b) with respect to any such series, the Company shall maintain such offices or agencies in connection with each series in the Borough of Manhattan, The City of New York, State of New York. With respect to any series of Securities issued in whole or in part as Unregistered Securities, the Company shall maintain one or more Paying Agents located outside the United States and its possessions and shall maintain such Paying Agents for a period of one year after the principal of such Unregistered Securities has become due and payable. During any period thereafter for which it is necessary in order to conform to United States tax law or regulations, the Company will maintain a Paying Agent outside the United States and its possessions to which the Unregistered Securities or coupons appertaining thereto may be presented for payment and will provide the necessary funds therefor to such Paying Agent upon reasonable notice. The Security Registrar shall keep a register with respect to each series of Securities issued in whole or in part as Registered Securities and to their transfer and exchange. The Company may appoint one or more co-Security Registrars acceptable to the Trustee and one or more additional Paying Agents for each series of Securities,

and the Company may terminate the appointment of any co-Security Registrar or Paying Agent at any time upon written notice. The term
"Security Register" or "Security Registrar" includes any co-Security Registrar. The term "Paying Agent" includes any additional Paying Agent. The
Company shall notify the Trustee of the name and address of any Agent not a party to this Indenture. Subject to Section 305, if the Company fails to maintain
a Security Registrar or Paying Agent, the Trustee shall act as such. The Company will give prompt written notice to the Trustee of the location, and any
change in the location, of such office or agency. If at any time the Company fails to maintain any such required office or agency or fails to furnish the Trustee
with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the
Company hereby appoints the Trustee as its agent to receive all such presentations, surrenders, notices and demands.

- (b) The Company may also from time to time designate one or more other offices or agencies where the Securities of one or more series may be presented or surrendered for any or all 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 each Place of Payment 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.
- (c) Anything herein to the contrary notwithstanding, any office or agency required by this Section may be maintained at any office of the Company in which event the Company shall perform all functions to be performed at such office or agency.

Section 10.03 <u>Money for Securities Payments to Be Held in Trust.</u>

- (a) If the Company at any time acts as its own Paying Agent with respect to any series of Securities, or any Tranche thereof, it will, on or before each due date of the principal of or any premium or interest on any of such Securities, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay the principal (and premium, if any) or interest so becoming due until such sums are 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.
- (b) Whenever the Company has one or more Paying Agents for any series of Securities, it will, on or prior to (and if on, then before 11:00 a.m. (New York City time)) each due date of the principal of and any premium or interest on such Securities, deposit with a Paying Agent a sum sufficient (in immediately available funds, if payment is made on the due date) to pay the principal and any premium and interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or interest as provided in the Trust Indenture Act and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.
- (c) The Company will cause each Paying Agent for any series of Securities, or any Tranche thereof, 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:
 - (i) comply with the provisions of the Trust Indenture Act applicable to it as a Paying Agent and
- (ii) during the continuance of any default by the Company (or any other obligor upon the Securities of that series) in the making of any payment in respect of the Securities of that series, upon the written request of the Trustee, forthwith pay to the Trustee all sums held in trust by such Paying Agent for payment in respect of the Securities of that series

- (d) 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 money.
- (e) Any money deposited with the Trustee or any Paying Agent, or received by the Trustee in respect of Eligible Obligations deposited with the Trustee pursuant to Section 401 or 404, or then held by the Company, in trust for the payment of the principal of and any premium or interest on any Security of any series and remaining unclaimed for two years (or such shorter period for the return of such funds to the Company under applicable abandoned property laws) after such principal, premium or interest has become due and payable shall be paid to the Company on 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 thereof, 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.

Section 10.04 Statement as to Compliance.

The Company will deliver to the Trustee, within 120 days after the end of each fiscal year of the Company ending after the date hereof, a written statement, which need not comply with Section 102, signed by the principal executive officer, the principal financial officer or the principal accounting officer of the Company stating, as to each signer thereof stating whether or not to the knowledge of the signers thereof it is in default in the performance and observance of any of the terms, provisions, and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and, if it is in default, specifying all such defaults and the nature and status thereof of which they may have knowledge.

Section 10.05 Corporate 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, rights (charter and statutory) and franchises; *provided*, *however*, that the Company shall not be required to preserve any such right or franchise if, in the judgment of the Company, the preservation thereof is no longer desirable in the conduct of the business of the Company.

Section 10.06 <u>Waiver of Certain Covenants.</u>

Except as otherwise specified as contemplated by Section 301 for Securities of such series, the Company may, with respect to the Securities of any series, omit in any particular instance to comply with any term, provision or condition set forth in (i) any additional covenants or restrictions specified with respect to the Securities of any series as contemplated by Section 301 if before the time for such compliance the Holders of not less than a majority in aggregate principal amount (or such larger proportion as may be required in respect of waiving a past default of any such additional covenant or restriction) of the Outstanding Securities of all series of equal ranking with respect to which such covenant or restriction was so specified, considered as one class, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition and (ii) Sections 1002 and 1004 and Article Eight if before the time for such compliance the Holders of at least a majority in principal amount of Securities of all series of equal ranking Outstanding under this Indenture by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition; but, in the case of clause (i) or (ii) of this Section, no such waiver shall extend to or affect such term, provision or condition except to the extent so expressly waived, and, until such waiver becomes 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 11.01 <u>Applicability of Article.</u>

Securities of any series that are redeemable before their Stated Maturity (or, if the principal of the Securities of any series is payable in installments, the Stated Maturity of the final installment of the principal thereof) shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 301(b) for Securities of any series) in accordance with this Article.

Section 11.02 <u>Election to Redeem; Notice to Trustee.</u>

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution or an Officer's Certificate. In case of any redemption at the election of the Company of less than all the Securities of any series, the Company shall, at least 45 days prior to the Redemption Date fixed by the Company (unless a shorter notice is satisfactory to the Trustee in its sole discretion), 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 (a) prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, or (b) pursuant to an election of the Company that is subject to a condition specified in the terms of such Securities the Company shall furnish the Trustee with an Officer's Certificate evidencing compliance with such restriction.

Section 11.03 <u>Selection by Trustee of Securities to Be Redeemed.</u>

If less than all the Securities of any series are to be redeemed, unless the procedures of the Depositary provide otherwise, the particular Securities to be redeemed shall be selected by the Trustee, from the Outstanding Securities of such series not previously called for redemption, by such method as is provided for any particular series, or, in the absence of any such provision, by such method as the Trustee deems 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; provided, however, that if, as indicated in an Officer's Certificate, the Company has offered to purchase all or any principal amount of the Securities then Outstanding of any series, and less than all of such Securities as to which such offer was made have been tendered to the Company for such purchase, the Trustee, if so directed by Company Order, shall select for redemption all or any principal amount of such Securities that have not been so tendered.

The Trustee shall promptly notify the Company and the Security Registrar 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 and the method it has chosen for the selection of such Securities.

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 Securities redeemed or to be redeemed only in part, to the portion of the principal amount of such Securities that has been or is to be redeemed.

Section 11.04 <u>Notice of Redemption.</u>

Unless otherwise specified as contemplated by Section 301 with respect to any series of Securities, notice of redemption shall be given by electronic transmission or first-class mail, postage prepaid, mailed not less than 30 nor more than 60 days prior to the Redemption Date, to each Holder of Securities to be redeemed, at such Holder's address appearing in the Security Register.

If Unregistered Securities are to be redeemed, notice of redemption shall be published in an Authorized Newspaper in The City of New York and, if such Securities to be redeemed are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located, or in such other city or cities as may be specified in the Securities, once in each of two different calendar weeks, the first publication to be not less than 30 nor more than 90 days before the redemption date.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price, or the formula pursuant to which the Redemption Price is to be determined if the Redemption Price cannot be determined at the time notice is given,
- if less than all the Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amounts) of the particular Securities to be redeemed, and the portion of the principal amount of any Security to be redeemed in part and, in the case of any such Security of such series to be redeemed in part, that, on and after the Redemption Date, upon surrender of such Security, a new Security or Securities of such series in principal amount equal to the remaining unpaid principal amount thereof will be issued as provided in Section 1106,
- (4) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed and, if applicable, that interest thereon will cease to accrue on and after said date,
- (5) the place or places where such Securities and all unmatured coupons are to be surrendered for payment of the Redemption Price and accrued interest, if any,
 - (6) that the redemption is for a sinking fund, if such is the case,
- (7) the CUSIP, "ISIN" or similar number(s), if any, assigned to such Securities; *provided however*, that such notice may state that no representation is made as to the correctness of CUSIP, "ISIN" or similar number(s), and the redemption of such Securities shall not be affected by any defect in or omission of such number(s), and
 - (8) such other matters as the Company shall deem desirable or appropriate.

Unless otherwise specified with respect to any Securities in accordance with Section 301, with respect to any notice of redemption of Securities at the election of the Company, unless, upon the giving of such notice, such Securities are deemed to have been paid in accordance with Section 401, such notice may state that such redemption shall be conditional upon the receipt by the Paying Agent or Agents for such Securities, on or prior to the date fixed for such redemption, of money sufficient to pay the principal of and premium, if any, and interest, if any, on such Securities and that if such money has not been so received such notice shall be of no force or effect and the Company shall not be required to redeem such Securities. In the event that such notice of redemption contains such a condition and such money is not so received, the redemption shall not be made and within a reasonable time thereafter notice shall be given, in the manner in which the notice of redemption was given, that such money was not so received and such redemption was not required to be made, and the Paying Agent or Agents for the Securities otherwise to have been redeemed shall promptly return to the Holders thereof any of such Securities that had been surrendered for payment upon such redemption.

Notice of redemption of Securities to be redeemed at the election of the Company, and any notice of non-satisfaction of a condition for redemption as aforesaid, shall be given by the Company or, at the Company's request, by the Security Registrar in the name and at the expense of the Company. Notice of

mandatory redemption of Securities shall be given by the Security Registrar in the name and at the expense of the Company.

Section 11.05 <u>Securities Payable on Redemption Date.</u>

- Notice of redemption having been given as aforesaid, and the conditions, if any, set forth in such notice having been satisfied, the Securities or portions thereof so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified, and from and after such date (unless the Company defaults in the payment of the Redemption Price and accrued interest, if any) such Securities, or portions thereof, if interest-bearing, shall cease to bear interest. Upon surrender of any such Security together with all unmatured coupons for redemption in accordance with said notice, such Security or portion thereof, if any, shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date but in the case of Unregistered Securities installments of interest due on or prior to the Redemption Date will be payable to the bearers of the coupons for such interest by check or draft upon surrender of such coupons; *provided*, *however*, that installments of interest 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 Regular Record Dates according to their terms and the provisions of Section 307.
- (b) If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal and any premium shall, until paid, bear interest from the Redemption Date at the rate prescribed therefor in the Security.

Section 11.06 <u>Securities Redeemed in Part.</u>

Any Security that is to be redeemed only in part 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 or her 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, and of like tenor and in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered.

ARTICLE 12

REPAYMENT OF SECURITIES AT OPTION OF HOLDERS

Section 12.01 <u>Applicability of Article.</u>

Securities of any series that are repayable before their Stated Maturity at the option of the Holders shall be repayable 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 12.02 <u>Notice of Repayment Date.</u>

Notice of any Repayment Date with respect to Securities of any series shall be given by the Company not less than 30 nor more than 45 days prior to such Repayment Date (or at such other times as may be specified for such repayment or repurchase pursuant to Section 301) to each Holder of Securities of such series in accordance with Section 106 (except as otherwise specified as contemplated by Section 301 for Securities of any series).

The notice as to the Repayment Date shall state (unless otherwise specified for such repayment or repurchase pursuant to Section 301):

- (1) the Repayment Date;
- (2) the principal amount of the Securities required to be repaid or repurchased and the Repayment Price (or the formula pursuant to which the Repayment Price is to be determined if the Repayment Price cannot be determined at the time the notice is given);
- (3) the place or places where such Securities are to be surrendered for payment of the Repayment Price, and accrued interest, if any, and the date by which Securities must be so surrendered in order to be repaid or repurchased; that any Security not tendered or accepted for payment shall continue to accrue interest;
- (4) that, unless the Company defaults in making such payment or the Paying Agent is prohibited from paying such money to the Holders on that date pursuant to the terms of this Indenture, Securities accepted for payment pursuant to any such offer of repayment or repurchase shall cease to accrue interest after the Repayment Date;
- (5) that Holders electing to have a Security repaid or purchased pursuant to such offer may elect to have all or any portion of such Security purchased;
- (6) that Holders electing to have a Security repaid or repurchased pursuant to any such offer shall be required to surrender the Security, with such customary documents of surrender and transfer as the Company may reasonably request, duly completed, or transfer by book-entry transfer, to the Company or the Paying Agent at the address specified in the notice at least two Business Days prior to the Repayment Date;
- (7) that Holders shall be entitled to withdraw their election if the Company or the Paying Agent, as the case may be, receives, not later than the expiration of the offer to repay or repurchase, a telegram, facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Security the Holder delivered for purchase and a statement that such Holder is withdrawing its election to have such Security purchased;
- (8) that, in the case of a repayment or repurchase of less than all Outstanding Securities of a series, the method of selection of Securities to be repaid or repurchased to be applied by the Trustee if the principal amount of properly tendered Securities exceeds the principal amount of the Securities to be repaid or repurchased;
- (9) that Holders whose Securities are purchased only in part shall be issued new Securities of the same series equal in principal amount to the unpurchased portion of the Securities surrendered (or transferred by book-entry transfer); and
- (10) the CUSIP or other identification number, if any, printed on the Securities being repurchased and that no representation is made as to the correctness or accuracy of the CUSIP or other identification number, if any, listed in such notice or printed on the Securities.

Section 12.03 <u>Securities Payable on Repayment Date.</u>

The form of option to elect repurchase or repayment having been delivered as specified in the form of Security for such series, the Securities of such series so to be repaid (after application of the method of selection described pursuant to clause (9) of Section 1202, if the principal amount of properly tendered Securities exceeds the principal amount of the Securities to be repaid or repurchased) shall, on the Repayment

Date, become due and payable at the Repayment Price applicable thereto and from and after such date (unless the Company defaults in the payment of the Repayment Price and accrued interest) such Securities shall cease to bear interest. Upon surrender of any such Security for repayment in accordance with said notice, such Security shall be paid by the Company at the Repayment Price together with accrued interest, if any, to the Repayment Date; *provided*, *however*, that if a Security is repaid or repurchased on or after a Regular Record Date but on or prior to the Stated Maturity of any installments of interest, then any accrued and unpaid interest due on such Stated Maturity 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 Regular Record Dates according to their terms and the provisions of Section 307.

If any Security is not paid upon surrender thereof for repayment, the principal (and premium, if any) shall, until paid, bear interest from the Repayment Date at the rate prescribed therefor in such Security.

Section 12.04 <u>Securities Repaid in Part.</u>

Any Security that by its terms may be repaid in part at the option of the Holder and that is to be repaid only in part shall be surrendered at any office or agency of the Company designated for that purpose pursuant to Section 1002 (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 or her 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, as provided in Section 305, of any authorized denomination as requested by such Holder, in aggregate principal amount equal to and in exchange for the unrepaid portion of the principal of the Security so surrendered.

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

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

	LION BIOTECHNOLOGIES, INC.
[CORPORATE SEAL]	By: Name: Title:
Attest:	
Secretary	[TRUSTEE]
	By: Name: Title:
	54

TroyGould PC 1801 Century Park East 16th Floor Los Angeles, California 90067

November 20, 2014

Lion Biotechnologies, Inc. 21900 Burbank Blvd, Third Floor Woodland Hills, California 91367

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by Lion Biotechnologies, Inc., a Nevada corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") of a Registration Statement on Form S-3 (the "Registration Statement"), including a related prospectus included in the Registration Statement (the "Prospectus"). The Registration Statement relates to the offer by the Company from time to time of up to \$100,000,000 of securities of the Company (collectively, "Securities"), which may include, among other Securities, (1) shares of common stock, par value 0.000041666 per share ("Common Stock"); (2) shares of preferred stock, par value \$0.001 per share ("Preferred Stock"); (3) warrants ("Warrants") to purchase Common Stock, Preferred Stock, or debt securities ("Debt Securities"); and (4) units consisting of shares of Common Stock, shares of Preferred Stock, Debt Securities and/or Warrants ("Units").

The Prospectus contemplates that it will be supplemented in the future by one or more prospectus supplements setting forth the specific terms of each offer and sale of Securities (each, a "<u>Prospectus Supplement</u>").

In connection with this opinion, we have examined and relied upon the Registration Statement and the Prospectus, the Company's amended and restated articles of incorporation (the "Articles of Incorporation"), the Company's bylaws, as amended (the "Bylaws"), resolutions of the board of directors of the Company relating to the Registration Statement, the Securities and related matters, and originals or copies certified to our satisfaction of such other records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently sought to verify such matters.

Our opinions herein are expressed solely with respect to the federal laws of the United States, the internal laws of the State of California, and the Nevada General Corporation Law (including applicable rules and regulations promulgated under the Nevada General Corporation Law and applicable reported judicial decisions interpreting the Nevada General Corporation Law). We neither express nor imply any opinion with respect to any other laws or the laws of any other jurisdiction. The Securities may be issued from time to time on a delayed or continuous basis, and the opinions expressed below concern only laws that are in effect on the date of this opinion letter. We undertake no, and hereby disclaim any, obligation to advise you of any change in any matter set forth herein, whether based on a change in laws, a change in any fact relating to the Company, or any other circumstance. This opinion letter is limited to the matters expressly stated herein, and no opinions are to be inferred or may be implied beyond the opinions expressly set forth herein. Without limiting the generality of the foregoing, we neither express nor imply any opinion regarding the contents of the Registration Statement, the Prospectus, or any Prospectus Supplement other than as expressly stated herein with respect to the issuance of the Securities.

Based upon and subject to the foregoing and the additional qualifications and limitations set forth below, we are of the opinion that:

- 1. When the issuance and the terms of sale of shares of Common Stock have been duly authorized and established by the board of directors of the Company in conformity with the Articles of Incorporation and Bylaws, and such shares have been issued and delivered against payment of their full purchase price and in accordance with the applicable purchase, underwriting, or similar agreement and the terms of the Registration Statement, the Prospectus, and the applicable Prospectus Supplement (and, if issued upon the exercise of Warrants or the conversion of Preferred Stock or Debt Securities, when such shares of Common Stock have been duly issued and delivered as contemplated by the terms of the Warrants, Preferred Stock or Debt Securities, as applicable), such shares of Common Stock will be validly issued, fully paid, and nonassessable.
- 2. When the issuance and the terms of sale of shares of Preferred Stock have been duly authorized and established by the board of directors of the Company in conformity with the Articles of Incorporation, including the designations of rights, preferences and privileges of such Preferred Stock, and the Bylaws and such shares have been issued and delivered against payment of their full purchase price and in accordance with the applicable purchase, underwriting, or similar agreement and the terms of the Registration Statement, the Prospectus, and the applicable Prospectus Supplement (and, if issued upon the exercise of Warrants or conversion of Debt Securities, when such shares of Preferred Stock have been duly issued and delivered as contemplated by the terms of the Warrants or Debt Securities, as applicable), such shares of Preferred Stock will be validly issued, fully paid, and nonassessable.
- 3. When the issuance and the terms of sale of Warrants have been duly authorized and established by the board of directors of the Company and such Warrants have been issued and delivered against payment of their full purchase price and in accordance with the applicable warrant, underwriting, or similar agreement and the terms of the Registration Statement, the Prospectus, and the applicable Prospectus Supplement, such Warrants will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
- 4. When the issuance and the terms of sale of Units have been duly authorized and established by the board of directors of the Company and such Units have been issued and delivered against payment of their full purchase price and in accordance with the applicable purchase, underwriting, or similar agreement and the terms of the Registration Statement, the Prospectus, and the applicable Prospectus Supplement, such Units will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

With your permission, we have made (and are relying upon) the following assumptions, without any independent investigation or inquiry by us, and our opinions expressed above are subject to, and limited and qualified by the effect of, the following assumptions: (1) all representations, warranties, and other statements as to factual matters that are contained in the documents that we reviewed in connection with this opinion letter are accurate and complete, and all corporate records furnished to us by the Company are accurate and complete; (2) the Registration Statement will be declared effective under the Securities Act of 1933, as amended (the "Securities Act"), prior to the Company's offer and sale of any Securities, and such effectiveness will not be suspended or terminated as of the date of the offer and sale of any Securities; (3) the Company's board of directors will adopt resolutions duly authorizing each offer and sale of Securities and establishing the terms of the sale of such Securities, and such resolutions will not be rescinded and will not be modified in a manner that adversely affects the opinions expressed above; (4) in compliance with the Securities Act and the rules and regulations thereunder, the Company will prepare and file with the Commission a Prospectus Supplement describing the terms of each offering of Securities; (5) a definitive indenture or purchase, underwriting, warrant, or similar agreement will be duly executed and delivered by the Company and the other parties thereto with respect to each offer and sale of Securities; (6) the number of shares of the Company's Common Stock or Preferred Stock, as applicable, to be issued pursuant to the Registration Statement, the

Prospectus, and any Prospectus Supplement, together with the number of then-outstanding shares of Common Stock or Preferred Stock, will not exceed the number of shares of Common Stock or Preferred Stock authorized in the Articles of Incorporation; (7) the purchase price of all Securities will consist solely of cash; (8) in connection with each issuance of Common Stock, Preferred Stock, Warrants, or Units, the Company will duly execute and deliver stock certificates, warrant certificates, or unit certificates, as applicable, in the form filed by the Company as exhibits to the Registration Statement or, with respect to Common Stock or Preferred Stock issued on an uncertificated basis, the Company will comply with applicable law regarding the documentation of uncertificated securities; (9) the Company's offer and sale of Securities, and compliance with any definitive indenture or purchase, underwriting, warrant, or similar agreement pertaining to such offer and sale, will not violate any applicable law, rule, regulation, or public policy or any judgment, order or decree of any court having jurisdiction over the Company; (10) the Company's offer and sale of Securities, and compliance with any definitive indenture or purchase, underwriting, warrant, or similar agreement pertaining to such offer and sale, will not constitute a default under, or a breach of, any agreement to which the Company is a party or is otherwise subject, and neither the Articles of Incorporation nor the Bylaws will be amended after the date of this opinion letter in a manner that would cause such offer or sale of Securities to constitute a violation of the Articles of Incorporation or the Bylaws; (11) each Warrant and purchase, underwriting and similar agreement pertaining to the offer and sale of Securities (other than an indenture pertaining to the issuance of Debt Securities) will be governed by the internal laws of the State of California; and (12) with respect to documents that we reviewed in connection with this opinion, all documents submitted to us as originals are authentic; all documents submitted to us as certified, facsimile, or photostatic copies conform to the originals of such documents, and such original documents are authentic; the signatures on all documents are genuine; and all natural persons who have executed any of the documents have the legal capacity to do so.

Our opinions are subject to: (i) the effect of bankruptcy, insolvency, reorganization, preference, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights and remedies of creditors; (ii) the effect of general principles of equity, whether considered in a proceeding in equity or at law (including the possible unavailability of specific performance or injunctive relief), concepts of materiality, reasonableness, good faith and fair dealing, and the discretion of the court before which a proceeding is brought; (iii) the invalidity under certain circumstances under law or court decisions of provisions providing for the indemnification of or contribution to a party with respect to a liability where such indemnification or contribution is contrary to public policy; and (iv) we express no opinion as to (a) any provision for liquidated damages, default interest, late charges, monetary penalties, make-whole premiums or other economic remedies to the extent such provisions are deemed to constitute a penalty, (b) consents to, or restrictions upon, governing law, jurisdiction, venue, arbitration, remedies or judicial relief, (c) waivers of rights or defenses, (d) any provision requiring the payment of attorneys' fees, where such payment is contrary to law or public policy, (e) the creation, validity, attachment, perfection, or priority of any lien or security interest, (f) advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitation, trial by jury or at law, or other procedural rights, (g) waivers of broadly or vaguely stated rights, (h) provisions for exclusivity, election or cumulation of rights or remedies, (i) provisions authorizing or validating conclusive or discretionary determinations, (j) grants of setoff rights, (k) proxies, powers and trusts, (l) provisions prohibiting, restricting, or requiring consent to assignment or transfer of any right or property, (m) any provision to the extent it requires

This opinion letter is provided in connection with the transactions contemplated by the Registration Statement and may not be used or relied upon for any other purpose without our express written consent. The only opinions rendered by us consists of those set forth above, and no opinion may be implied or inferred beyond that expressly stated.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and further consent to the use of our name under the heading "Legal Matters" in the Prospectus. In giving such consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ TROYGOULD PC

TROYGOULD PC

CRONE KLINE RINDE LLP 488 Madison Avenue, 12th Floor, New York, NY 10022

November 20, 2014

Lion Biotechnologies, Inc. 21900 Burbank Blvd., Third Floor Woodland Hills, CA 91367 Attn: Michael Handelman, Chief Financial Officer

Ladies and Gentlemen:

We are acting as special counsel to Lion Biotechnologies, Inc., a Nevada corporation (the "Company"), in connection with its registration statement on Form S-3 (the "Registration Statement"), filed with the Securities and Exchange Commission relating to the proposed public offering of debt securities (the "Debt Securities"), which will be issued pursuant to one or more indentures in the form filed as an exhibit to the Registration Statement, as amended or supplemented from time to time (each, an "Indenture"), between the Company, as obligor, and a trustee chosen by the Company and qualified to act as such under the Trust Indenture Act of 1939, as amended (the "Trustee"). 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, 17 C.F.R. § 229.601(b)(5), in connection with the Registration Statement.

For purposes of this opinion letter, we have assumed that (i) the issuance, sale, amount and terms of any Debt Securities of the Company to be offered from time to time will have been duly authorized and established by proper action of the board of directors of the Company or a duly authorized committee of such board ("Board Action") consistent with the procedures and terms described in the applicable Indenture, and in accordance with the Company's charter and bylaws and the General Corporation Law of the State of Nevada, in a manner that does not violate any law, government or court-imposed order or restriction or agreement or instrument then binding on the Company or otherwise impair the legal or binding nature of the obligations represented by the applicable Debt Securities; (ii) at the time of offer, issuance and sale of any Debt Securities, the Registration Statement will have been declared effective under the Securities Act of 1933, as amended (the "Act"), and no stop order suspending its effectiveness will have been issued and remain in effect; (iii) any Debt Securities will be issued pursuant to the applicable Indenture, which will be filed as Exhibit 4.1 to the Registration Statement; (iv) each applicable Indenture will be qualified under the Trust Indenture Act of 1939, as amended; (v) if being sold by the issuer thereof, the Debt Securities will be delivered against payment of valid consideration therefor and in accordance with the terms of the applicable Board Action authorizing such sale and any applicable underwriting agreement or purchase agreement and as contemplated by the Registration Statement and/or the applicable prospectus supplement; and (vi) the Company will remain a Nevada corporation.

To the extent that the obligations of the Company with respect to the Debt Securities may be dependent upon such matters, we assume for purposes of this opinion that the other party under an applicable Indenture, namely, the Trustee, is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization; that such other party is duly qualified to engage in the activities contemplated by the applicable Indenture; that the applicable Indenture has been duly authorized, executed and delivered by the other party and constitutes the legal, valid and binding obligation of the other party enforceable against the other party in accordance with its terms; that such other party is in compliance with respect to performance of its obligations under the applicable Indenture, with all applicable laws and regulations; and that such other party has the requisite organizational and legal power and authority to perform its obligations under the applicable Indenture.

This opinion letter is based as to matters of law solely on the General Corporation Law of the State of Nevada and the laws of the State of New York (but not including any laws, statutes, ordinances, administrative decisions, rules or regulations of any political subdivision below the state level). We express no opinion herein as to any other laws, statutes, ordinances, rules, or regulations (and in particular, we express no opinion as to any effect that such other laws, statutes, ordinances, rules, or regulations may have on the opinions expressed herein).

When the issuance and the terms of the sale of the Debt Securities have been duly authorized by the appropriate Board Action and duly established in conformity with the applicable Indenture so as not to violate any applicable law or result in a default under, or breach of, any agreement or instrument binding upon the Company and so as to comply with any requirement or restriction imposed by any court or governmental or regulatory body having jurisdiction over the Company or any of its property, and the Debt Securities have been duly executed, authenticated, issued, delivered and sold in accordance with the applicable definitive purchase, underwriting or similar agreement, as contemplated by the Registration Statement, the Prospectus and the related Prospectus Supplement, and in the manner provided for in the applicable Indenture against payment of the purchase price therefor, the Debt Securities will constitute valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms.

The opinion expressed above with respect to the valid and binding nature of obligations may be limited by bankruptcy, insolvency, reorganization, receivership, moratorium or other laws affecting creditors' rights (including, without limitation, the effect of statutory and other law regarding fraudulent conveyances, fraudulent transfers and preferential transfers) and by the exercise of judicial discretion and the application of principles of equity, good faith, fair dealing, reasonableness, conscionability and materiality (regardless of whether the Debt Securities are considered in a proceeding in equity or at law).

This opinion letter has been prepared for use in connection with the Registration Statement. We assume no obligation to advise you of any changes in the foregoing subsequent to the effective date of the Registration Statement.

We hereby consent to the filing of this opinion letter as Exhibit 5.2 to the Registration Statement and to the reference to this firm under the caption "Legal Matters" in the prospectus constituting a part of the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Act.

Very truly yours,

/s/ CRONE KLINE RINDE LLP

CRONE KLINE RINDE LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in the foregoing Registration Statement on Form S-3 of our report dated March 27, 2014 relating to the balance sheets of Lion Biotechnologies, Inc. as of December 31, 2013 and 2012, and the related statements of operations, changes in stockholders' equity (deficiency), and cash flows for the years then ended and for the period September 17, 2007 (inception) to December 31, 2013. We also consent to the reference to our Firm under the caption "Experts" in the Registration Statement.

/s/ Weinberg & Company Weinberg & Company, P.A.

Los Angeles, California November 20, 2014