Avantor Funding, Inc.

€550,000,000 % Senior First Lien Notes due 2025

Avantor Funding, Inc., or "Avantor Funding" or the "Issuer," a Delaware corporation, is offering €550,000,000 aggregate principal amount of % senior first lien notes due 2025, or the "notes."

The notes will mature on , 2025. The Issuer will pay interest on the notes semi-annually in arrears on and of each year, commencing on , 2021.

The Issuer may redeem some or all of the notes at any time prior to , 2022 at a price equal to 100% of the principal amount of the notes redeemed, plus accrued and unpaid interest, if any, to, but not including, the redemption date, plus a "make-whole" premium, as described in this offering circular. On or after , 2022, the Issuer may redeem some or all of the notes at the applicable redemption prices set forth in this offering circular, plus accrued and unpaid interest, if any, to, but not including, the redemption date. The Issuer may also redeem up to 40% of the aggregate principal amount of the notes at any time prior to , 2022 using the net cash proceeds from certain equity offerings at the redemption price set forth in this offering circular, plus accrued and unpaid interest, if any, to, but not including, the redemption date. See "Description of Notes—Optional Redemption." Upon the occurrence of certain events constituting a change of control, the Issuer may be required to make an offer to repurchase the notes at a price equal to 101% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but not including, the redemption date.

The notes will be fully and unconditionally guaranteed, jointly and severally, by Vail Holdco Sub LLC, or "Holdings," and each existing and subsequently acquired or organized direct or indirect domestic restricted subsidiary of Holdings (other than the Issuer) that also guarantees the Senior Secured Credit Facilities (as defined herein), or collectively, the "guarantors," and such guarantees, the "guarantees." The notes will be secured on a pari passu first-lien basis by the same assets that secure the Issuer's and the guarantors' obligations under the Senior Secured Credit Facilities, subject to permitted liens and applicable local law limitations, rank equally in priority as to the collateral securing the notes with respect to borrowings and guarantees under the Senior Secured Credit Facilities and any other existing future pari passu first lien indebtedness The notes will be senior secured obligations and the notes and the related guarantees will rank equally in right of payment with all of the Issuer's and guarantors' existing and future senior indebtedness, including indebtedness under the Senior Secured Credit Facilities and the Existing Unsecured Notes (as defined herein). The notes and the related guarantees will be effectively senior to any of the Issuer's and guarantors' existing and future unsecured indebtedness, including the Existing Unsecured Notes, to the extent of the value of the assets securing the notes. In addition, the notes and the related guarantees will rank senior in right of payment to all of the Issuer's and guarantors' future subordinated indebtedness and will be structurally subordinated to the liabilities of our non-guarantor subsidiaries, including indebtedness under the A/R Facility (as defined herein).

There is currently no public market for the notes. The Issuer intends to apply to The International Stock Exchange Authority Limited (the "Authority") for the listing of, and permission to deal in, the notes on the Official List of The International Stock Exchange (the "Exchange"). The listing application will be subject to approval by the Authority which is licensed to operate an investment exchange by the Guernsey Financial Services Commission under the Protection of Investors (Bailiwick of Guernsey) Law, 1987, as amended. The Exchange is not a regulated market for the purposes of EU Directive 2014/65/EU (as amended, "MiFID II"). There is no assurance that the notes will be listed and admitted to trade on the Official List of the Exchange. Consummation of the offering of the notes is not contingent on the Issuer making an application or obtaining such listing or admission to trading.

Investing in the notes involves risks. See "Risk Factors" beginning on page 20 for a discussion of certain risks that you should consider in connection with an investment in the notes.

Offering price of the notes: %, plus accrued and unpaid interest, if any, from , 2020

The notes and the guarantees have not been and will not be registered under the Securities Act of 1933, as amended, or the "Securities Act," or the securities law of any other jurisdiction. The notes will not be offered or sold within the United States or to U.S. persons, except to persons reasonably believed to be qualified institutional buyers in reliance on the exemption from registration provided by Rule 144A under the Securities Act and to certain non-U.S. persons in transactions outside the United States in reliance on Regulation S under the Securities Act. Prospective purchasers that are qualified institutional buyers are hereby notified that sellers of the notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. The notes are not transferable except in accordance with the restrictions described under "Transfer Restrictions." The notes and the guarantees will not be entitled to any registration rights and the Issuer will not be required to complete a registered exchange offer or shelf registration or prospectus with respect to the notes or the guarantees.

The initial purchasers of the notes (the "initial purchasers") expect to deliver to investors the notes only in book-entry form through Euroclear and Clearstream (each as defined herein), in each case, on or about , 2020. See "Book Entry; Delivery and Form."

Joint Active Book-Running Managers

Goldman Sachs & Co. LLC **Citigroup**

Joint Book-Running Managers

Barclays **J.P. Morgan** **BofA Securities**

Co-Managers

PNC Capital Markets LLC **HSBC** **Jefferies**

Offering circular dated , 2020

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We and the initial purchasers have not authorized anyone to provide you with any information other than that contained in or incorporated by reference in this offering circular. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you.

We and the initial purchasers are offering to sell the notes only in places where offers and sales are permitted.

You should not assume that the information contained in or incorporated by reference in this offering circular is accurate as of any date other than the date on the front cover of this offering circular. Neither the delivery of this offering circular nor any sale made hereunder shall under any circumstances imply that the information in or incorporated by reference in this offering circular is correct as of any date after the date on the cover of this offering circular. The business, financial conditions, results of operations and prospects of the Issuer may have changed since such date.

We are furnishing this offering circular on a confidential basis in connection with an offering that is exempt from registration under, or not subject to, the Securities Act solely to allow prospective investors to consider the purchase of the notes. Delivery of this offering circular to any other person or any reproduction of this offering circular, in whole or in part, without our or the initial purchasers' prior consent is prohibited. The information contained in or incorporated by reference in this offering circular has been provided by us and other sources

identified in this offering circular. We accept responsibility for the information contained in or incorporated by reference in this offering circular. We, and not the initial purchasers, have ultimate authority over such information, including its content and whether and how to communicate such information. No representation or warranty, express or implied, is made by the initial purchasers or the trustee under the indenture that will govern the notes as to the accuracy or completeness of the information contained in or incorporated by reference in this offering circular, and nothing contained in or incorporated by reference in this offering circular is, or should be relied upon as, a promise or representation by the initial purchasers or the trustee. If you do not purchase the notes, or this offering of the notes is terminated, you agree to return this offering circular to: Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attn: Registration Department or Citigroup Global Markets Limited, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom, Attention: Syndicate Desk.

THE NOTES AND RELATED GUARANTEES DESCRIBED IN THIS OFFERING CIRCULAR HAVE NOT BEEN REGISTERED WITH, RECOMMENDED BY OR APPROVED BY THE U.S. SECURITIES AND EXCHANGE COMMISSION, OR THE "SEC," OR ANY OTHER FEDERAL, STATE OR PROVINCIAL SECURITIES COMMISSION OR REGULATORY AUTHORITY, NOR HAS THE SEC OR ANY SUCH FEDERAL, STATE OR PROVINCIAL SECURITIES COMMISSION OR REGULATORY AUTHORITY PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFERING CIRCULAR. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE. THE NOTES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR AN EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO RETAIN OWNERSHIP OF THE SECURITIES AND TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME.

The Issuer intends to apply to list the notes on the Official List of the Exchange within a reasonable period of time after the Issue Date. The listing application will be subject to approval by the Authority. There can be no assurance that the application to list the notes on the Official List of the Exchange will be approved and settlement of the notes is not conditioned on the Issuer making an application or obtaining such listing or admission to trading. The Exchange is not a regulated market for the purposes of MiFID II. Neither the admission of the notes to be listed on the Official List of the Exchange, nor the approval of this offering circular pursuant to the listing requirements of the Exchange shall constitute a warranty or representation by the Exchange as to the competence of the service providers to, or any other party connected with, the Issuer, the adequacy of information contained in this offering circular or the suitability of the Issuer for investment or any other purposes.

Carey Olsen Corporate Finance Limited is acting as listing agent for the Issuer and for no one else in connection with the listing of the notes or to trading on the Exchange and will not be responsible to anyone other than the Issuer.

You must comply with all applicable laws and regulations in connection with the distribution of this offering circular and the offer or sale of the notes. See "Transfer Restrictions." You are not to construe the contents of this offering circular as investment, legal or tax advice. You should consult your own counsel, accountant and other advisors as to legal, tax, business, financial and related aspects of a purchase of the notes.

We are not, and the initial purchasers are not, making any representation to you regarding the legality of an investment in the notes by you under appropriate legal investment or similar laws.

This offering circular is being provided on a confidential basis (1) to persons reasonably believed to be "qualified institutional buyers" as defined in Rule 144A under the Securities Act for informational use solely in connection with their consideration of the purchase of the notes and (2) in offshore transactions complying with Rule 903 or Rule 904 of Regulation S under the Securities Act. Its use for any other purpose is not authorized. This offering circular may not be copied or reproduced in whole or in part, nor may it be distributed or any of its contents be disclosed to anyone other than the prospective investors to whom it is being provided.

In making your purchase, you will be deemed to have made certain acknowledgments, representations and agreements as indicated in this offering circular under the heading "Transfer Restrictions." The notes are subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under the Securities

Act and applicable state securities laws pursuant to registration or exemption therefrom. You should be aware that you may be required to bear the financial risks of investing in the notes for an indefinite period of time. See "Transfer Restrictions."

This offering circular contains or incorporates by reference summaries, believed to be accurate, of some of the terms of certain documents, but reference is made to the actual documents, copies of which will be made available upon request. For the complete information contained in those documents, see "Where You Can Find More Information and Incorporation by Reference."

No person is authorized in connection with any offering made by this offering circular to give any information or to make any representation not contained in or incorporated by reference in this offering circular and, if given or made, any other information or representation must not be relied upon as having been authorized by us or the initial purchasers. The information contained in or incorporated by reference in this offering circular is as of the date hereof and subject to change, completion or amendment without notice. Neither the delivery of this offering circular at any time nor any subsequent commitment to enter into any financing shall, under any circumstances, create any implication that there has been no change in the information set forth in or incorporated by reference in this offering circular or in our affairs since the date of this offering circular.

In making an investment decision regarding the notes offered by this offering circular, you must rely on your own examination of our company and the terms of this offering, including the merits and risks involved. This offering is being made on the basis of this offering circular. Any decision to purchase notes in this offering must be based on the information contained in or incorporated by reference in this offering circular.

We reserve the right to withdraw this offering of notes at any time, and we and the initial purchasers reserve the right to reject any commitment to subscribe for the notes, in whole or in part, and to allot to you less than the full amount of the notes subscribed for by you. We are making this offering subject to the terms described in this offering circular and the indenture related to the notes.

The notes will be available in book-entry form only. We expect that the notes sold pursuant to this offering circular will be issued in the form of one or more global certificates, all of which will be deposited and held by, or on behalf of, and registered in the name of the nominee of the common depositary for the accounts of Euroclear Bank SA/NV, or "Euroclear," and for Clearstream Banking, société anonyme, or "Clearstream." Beneficial interests in the global certificates relating to the notes will be shown on, and transfers of such global certificates will be effected only through, records maintained by Euroclear or Clearstream and their participants. After the initial issuance of the global certificates, notes in certificated form will be issued in exchange for the global certificates only as set forth in the indenture that will govern the notes. See "Book Entry; Delivery and Form."

This offering circular does not constitute an offer to sell or a solicitation of an offer to buy the notes to any person in any jurisdiction where it is unlawful to make such an offer or solicitation. For a further description of certain restrictions on the offer and sale of the notes, see "Plan of Distribution" and "Transfer Restrictions."

It is expected that delivery of the notes will be made against payment therefor on or about , 2020, which is the business day following the date hereof (such settlement cycle being referred to as "T+ "). Under Rule 15c6-1 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), trades in the secondary market generally are required to settle in two business days unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the notes on any date prior to the second business day before delivery will be required, by virtue of the fact that the notes initially will settle in T+ , to specify an alternative settlement cycle at the time of any such trade to prevent failed settlement. Purchasers of the notes who wish to trade the notes on any date prior to the second business day before delivery should consult their own advisors.

STABILIZATION

In connection with the offering of the notes, Goldman Sachs & Co. LLC (or any person acting on behalf of Goldman Sachs & Co. LLC) may overallot notes or effect transactions with a view to supporting the price of the notes at a level higher than that which might otherwise prevail. However, stabilization may not necessarily occur. Any stabilization action may begin on or after the date on which adequate public disclosure of the terms of the offering of the notes is made and, if begun, may cease at any time, but must end no later than the earlier of 30 days after the issue and 60 days after the date of the allotment of the notes. Any stabilization action or overallotment must be conducted by the stabilizing manager (or persons acting on its behalf) in accordance with all applicable laws and rules.

MARKET AND INDUSTRY DATA

This offering circular includes or incorporates by reference market and industry data and forecasts that we have derived from independent consultants, publicly available information, various industry publications, other published industry sources and our internal data and estimates. Independent consultant reports, industry publications and other published industry sources generally indicate that the information contained therein was obtained from sources believed to be reliable.

Our internal data and estimates are based upon information obtained from trade and business organizations and other contacts in the markets in which we operate and our management's understanding of industry conditions. Although we believe that such information is reliable, we have not had this information verified by any independent sources. Similarly, our internal research is based upon our understanding of industry conditions, and such information has not been verified by any independent sources. Any estimates underlying such market-derived information and other factors could cause actual results to differ materially from those expressed in the independent parties' estimates and in our estimates.

CURRENCY PRESENTATION AND EXCHANGE RATE DATA

In this offering circular, (i) $ or U.S. dollar refer to the lawful currency of the United States and (ii) € or euro refer to the lawful currency of participating member states of the European Union. We present our consolidated financial data in U.S. dollars. This offering circular contains a translation of some euro amounts into U.S. dollar amounts at specified exchange rates solely for convenience. These translations should not be construed as representations that the U.S. dollar amounts represent such euro amounts or could be converted into euro at the rate indicated as of any dates mentioned in this offering circular. Euro denominated borrowings described in this offering circular on a historical basis have been translated to U.S. dollars using the exchange rate in effect on the date of such balance sheet.

TRADEMARKS, TRADE NAMES AND SERVICE MARKS

We own or have rights to trademarks or trade names that we use in conjunction with the operation of our business and that appear in this offering circular (or in documents we have incorporated by reference). This offering circular (or documents we have incorporated by reference) also contain trademarks, service marks, trade names and copyrights of other companies which, to our knowledge, are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this offering circular (or in documents we have incorporated by reference) may appear without the ® or ™ symbols, but the absence of such symbols does not indicate the registration status of the trademarks and is not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to such trademarks and trade names.

CERTAIN TERMS USED IN THIS OFFERING CIRCULAR

Unless otherwise indicated or the context otherwise requires (and except as otherwise defined under the heading "Description of Notes" for purposes of that section only), a reference in this offering circular to:

- "A/R Facility" refers to Avantor Receivables Funding, LLC's receivables facility with PNC Bank, National Association, as administrator;

- "Annual Report" refers to the annual report on Form 10-K for the fiscal year ended December 31, 2019, filed on February 14, 2020;

- "Avantor," "the Company," "we," "our" or "us" refers to Avantor, Inc., a Delaware corporation, or, as the context requires, to Avantor Inc. and its consolidated subsidiaries;

- "Dollar Secured Notes" refers to the Issuer's $1,500.0 million aggregate principal amount of 6.000% Senior First Lien Notes due 2024;

- "COVID-19" refers to the novel coronavirus disease;

- "Euro Secured Notes" refers to the Issuer's €500.0 million aggregate principal amount of 4.750% Senior First Lien Notes due 2024;

- "Existing Notes" refers collectively to the Existing Secured Notes and the Existing Unsecured Notes;

- "Existing Secured Notes" refers to the Dollar Secured Notes and the Euro Secured Notes;

- "Existing Dollar Term Loan Facility" refers to the dollar-denominated term loan tranche of the Senior Secured Credit Facilities;

- "Existing Euro Term Loan Facility" refers to the euro-denominated term loan tranche of the Senior Secured Credit Facilities;

- "Existing Unsecured Notes" refers to the (i) $1,550.0 million aggregate principal amount of 4.625% Senior Notes due 2028 and (ii) €400.0 million aggregate principal amount of 3.875% Senior Notes due 2028, in each case, issued by Avantor Funding;

- "guarantors" refers to Holdings and all of the existing and future subsidiaries of Holdings (other than the Issuer) that will guarantee the notes on a senior unsecured basis to the extent such subsidiaries guarantee our Senior Secured Credit Facilities;

- "NuSil" refers to NuSil Technology LLC and its subsidiaries;

- "Quarterly Reports" refers to (i) the quarterly report on Form 10-Q for the quarter ended March 31, 2020, filed on April 29, 2020, (ii) the quarterly report on Form 10-Q for the quarter ended June 30, 2020, filed on July 29, 2020 and (iii) the quarterly report on Form 10-Q for the quarter ended September 30, 2020, filed on October 27, 2020;

- "Revolver" refers to Avantor Funding's senior secured revolving credit facility of up to $515.0 million;

- "Senior Secured Credit Facilities" refers to the Term Loan Facility, the New Term Loan Facility (as defined herein) and the Revolver;

- "Term Loan Facility" refers to Avantor Funding's senior secured term loan facility, consisting of the Existing Dollar Term Loan Facility and the Existing Euro Term Loan Facility;

- "VWR" means VWR Corporation; and

- "VWR Acquisition" means the acquisition of VWR on November 21, 2017.

This offering circular includes and incorporates by reference the historical financial statements and other financial data of Avantor. Avantor Funding, the issuer of the notes offered hereby, is a wholly-owned subsidiary of Avantor. No separate financial information has been provided in this offering circular for Avantor Funding.

PRESENTATION OF CERTAIN FINANCIAL MEASURES

This offering circular contains, or incorporates by reference, certain financial measures, including Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage, that are not recognized under generally accepted accounting principles in the United States ("GAAP"). Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage have been presented in this offering circular as supplemental measures of financial performance that are not required by, or presented in accordance with GAAP. These non-GAAP financial measures are included in this offering circular because they are key metrics used by management to assess our financial performance. We use these measures to supplement GAAP measures of performance in order to evaluate the effectiveness of our business strategies, to make budgeting decisions, and to compare our performance against that of other peer companies using similar measures. We believe such measures are frequently used by analysts, investors and other interested parties to evaluate companies in our industry and are helpful supplemental measures to provide additional insight in evaluating a company's core operational performance as they exclude costs that do not relate to the underlying operation of their business and include cost savings that are expected to occur.

Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage are non-GAAP measures of our financial performance and should not be considered as alternatives to net income or loss as a measure of financial performance or any other performance measures derived in accordance with GAAP, nor should they be construed as an inference that our future results will be unaffected by unusual or other items. Additionally, Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage are not intended to be a measure of free cash flow for management's discretionary use, as they do not reflect certain cash requirements such as tax payments, debt service requirements, capital expenditures and certain other cash costs that may recur in the future. Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage contain certain other limitations, including the failure to reflect our cash expenditures, cash requirements for working capital needs and cash costs to replace assets being depreciated and/or amortized. Management compensates for these limitations by relying on our GAAP results in addition to using Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage. Our presentation of Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage is not necessarily comparable to other similarly titled captions of other companies due to different methods of calculation.

In calculating Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage, we make certain adjustments that are based on assumptions and estimates that may prove to have been inaccurate. Accordingly, you should not view our presentation of these adjustments as a projection that we will achieve these benefits but rather only as an indication of our current expectations.

For definitions of Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage and reconciliations to the most directly comparable measure under GAAP, see "Summary—Summary Historical Financial and Other Data."

NO REVIEW BY THE SEC; NO REGISTRATION RIGHTS

This offering circular, as well as any other documents in connection with this offering, will not be reviewed by the SEC. There are no registration rights associated with the notes or the guarantees and we have no present intention to offer to exchange the notes and the guarantees for notes and guarantees registered under the Securities Act or to file a registration statement with respect to the notes. The indenture that will govern the notes will not be qualified under the U.S. Trust Indenture Act of 1939, as amended.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This offering circular and the documents we incorporate by reference herein contain certain forward-looking statements and information relating to us that are based on the beliefs of our management as well as assumptions made by, and information currently available to, us. These statements include, but are not limited to, statements about our strategies, plans, objectives, expectations, intentions, expenditures and assumptions and other statements contained in or incorporated by reference in this offering circular that are not historical facts. When used

in this document, words such as “may,” “will,” “should,” “intend,” “potential,” “continue,” “anticipate,” “believe,” “estimate,” “expect,” “plan” and “project” and similar expressions as they relate to us are intended to identify forward-looking statements. These statements reflect our current views with respect to future events, are not guarantees of future performance and involve risks and uncertainties that are difficult to predict. Further, certain forward-looking statements are based upon assumptions as to future events that may not prove to be accurate.

The forward-looking statements included or incorporated by reference in this offering circular are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements included or incorporated by reference in this offering circular, including such statements taken from third-party industry and market reports. See “Market and Industry Data.” You should understand that the following important factors, in addition to those discussed herein under the caption “Risk Factors” in this offering circular and “Risk Factors” in our Annual Report and Quarterly Reports, each of which are incorporated by reference herein, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- disruptions to our operations;
- competition from other industry providers;
- our ability to implement our growth strategy;
- our ability to anticipate and respond to changing industry trends;
- adverse impacts from conditions affecting trends in consumer, business, and government spending;
- the impact of the recent COVID-19 pandemic;
- our dependence on sole or limited sources for some essential materials and components;
- our ability to successfully value and integrate acquired businesses;
- our products’ satisfaction of applicable quality criteria, specifications and performance standards;
- our ability to maintain our relationships with key customers;
- our ability to maintain our relationships with distributors;
- our ability to maintain consistent purchase volumes under purchase orders;
- our ability to maintain and develop relationships with drug manufacturers and contract manufacturing organizations;
- the impact of new laws, regulations, or other industry standards;
- changes in the interest rate environment that increase interest on our borrowings;
- adverse impacts from currency exchange rates or currency controls imposed by any government in major areas where we operate or otherwise;
- our ability to implement and improve processing systems and prevent a compromise of our information systems;

- our ability to protect our intellectual property and avoid third-party infringement claims;
- the fact that we are subject to product liability and other claims in the ordinary course of business;
- our ability to develop new products responsive to the markets we serve;
- the availability of raw materials;
- our ability to avoid negative outcomes related to the use of chemicals;
- our ability to maintain highly skilled employees;
- adverse impact of impairment charges on our goodwill and other intangible assets;
- fluctuations and uncertainties related to doing business outside the United States;
- our ability to obtain and maintain required regulatory clearances or approvals may constrain the commercialization of submitted products;
- our ability to comply with environmental, health and safety laws and regulations, or the impact of any liability or obligation imposed under such laws or regulations;
- our substantial indebtedness could adversely affect our financial condition and prevent us from fulfilling our debt or contractual obligations;
- our ability to generate sufficient cash flows or access sufficient additional capital to meet our debt obligations or to fund our other liquidity needs; and
- our ability to maintain an adequate system of internal control over financial reporting.

These forward-looking statements involve known and unknown risks, inherent uncertainties and other factors, which may cause our actual results, performance, time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. Any statements contained or incorporated by reference herein that are not statements of historical facts may be deemed to be forward-looking statements. Actual results and the timing of certain events may differ materially from those contained in these forward-looking statements.

Many of these factors are macroeconomic in nature and are, therefore, beyond our control. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from those described in this offering circular as anticipated, believed, estimated, expected, intended, planned or projected. We discuss many of these risks in greater detail under the heading “Risk Factors” in this offering circular and under “Risk Factors” in our Annual Report and Quarterly Reports, each of which is incorporated by reference herein. Unless required by United States federal securities laws, we neither intend nor assume any obligation to update these forward-looking statements, which speak only as of their dates.

SUMMARY

This summary highlights selected information contained elsewhere in this offering circular or incorporated by reference herein from our filings with the SEC listed under "Where You Can Find More Information and Incorporation by Reference." This summary does not contain all of the information that may be important to you in making a decision to purchase the notes. You should carefully read the entire offering circular and the information incorporated by reference herein, including the information presented under the sections entitled "Risk Factors" and "Special Note Regarding Forward-Looking Statements" included in this offering circular, the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited financial statements and the notes thereto in our Annual Report and the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the unaudited condensed consolidated financial statements and related notes thereto in our Quarterly Reports, each of which is incorporated by reference herein, before making an investment decision. This summary contains forward-looking statements that involve risks and uncertainties.

Company Overview

We are a leading global provider of mission critical products and services to customers in the biopharma, healthcare, education & government, and advanced technologies & applied materials industries. Our comprehensive offerings, which include materials & consumables, equipment & instrumentation and services & specialty procurement, are relied upon by our customers, often on a recurring basis, because they are frequently specified into their research, development and production processes. These processes are commonly organized into "workflows" that define the activities our customers perform each day. We collaborate closely with our customers to enable them to develop new innovative products, lower their development and production costs, improve product or process performance characteristics, and enhance the safety and reliability of the drugs, devices and other products they produce. In addition to relying on our products, many customers depend upon our services. Some of these services are performed by over 1,300 of our associates that are co-located with certain customers, working side-by-side with their scientists every day. Our local presence combined with our global infrastructure enable and promote successful relationships with our customers and connect us to over 225,000 of their locations in over 180 countries. Our mission is to set science in motion to create a better world.

We have global operations and an extensive product portfolio. We strive to enable customer success through innovation, Current Good Manufacturing Practices ("cGMP") manufacturing and comprehensive service offerings. The depth and breadth of our portfolio provides our customers a comprehensive range of products and services and allows us to create customized and integrated solutions for our customers. Selected offerings sold to our customers in discovery, research, development and production processes include:

- **Materials & consumables:** Ultra-high purity chemicals and reagents, lab products and supplies, highly specialized formulated silicone materials, customized excipients, customized single-use assemblies, process chromatography resins and columns, analytical sample prep kits and education and microbiology and clinical trial kits. In 2019, 33% of our revenues were from sales of proprietary materials & consumables and 40% of our revenues were from third-party materials & consumables;

- **Equipment & instrumentation:** Filtration systems, virus inactivation systems, incubators, analytical instruments, evaporators, ultra-low-temperature freezers, biological safety cabinets and critical environment supplies; and

- **Services & specialty procurement:** Onsite lab and production, clinical, equipment, procurement and sourcing and biopharmaceutical material scale-up and development services.

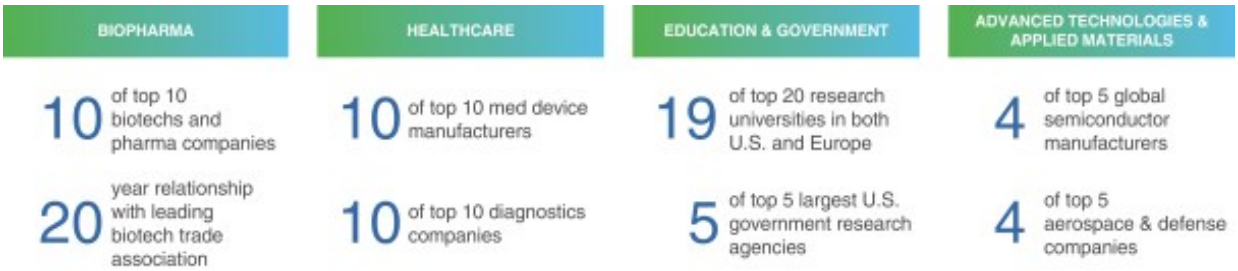
We have deep expertise in developing, customizing, manufacturing and supplying products for a wide variety of workflows, allowing us to provide tailored solutions throughout the lifecycle of our customers' products. In aggregate, we provide approximately six million products, including products we make as well as products from approximately 4,000 core suppliers across the globe. We manufacture products that meet or exceed the demanding

requirements of our customers across a number of highly-regulated industries. Our high-purity and ultra-high purity products, such as our J.T.Baker and SeaStar brand chemicals, are trusted by life sciences and electronic materials customers around the world and can be manufactured at purity levels as stringent as one part-per-trillion. Similarly, our NuSil brand of high-purity, customized silicones has been trusted for more than thirty years by leading medical device manufacturers and aerospace companies.

We complement our products with a range of value-added services. Each day, our onsite service associates work side-by-side with our customers to support their workflows. This close proximity to our customers and their workflows allows our associates to develop insights into how to serve them better. In certain cases, customers choose to fully leverage our value-added services and expertise by outsourcing specialized workflows entirely to us, further connecting us to their operations and allowing us to identify new business opportunities. We believe our growing services offering is a competitive advantage that further differentiates us from our competitors, deepens our relationships with current customers and enhances our ability to reach new ones.

We employ a differentiated innovation model that is informed by our embedded relationships with our customers and enables us to anticipate and align our innovation efforts with our customers' priorities. We engage with our customers early in their product development cycles through our 300-person innovation team to advance our customers' programs from research and discovery through development and commercialization. At each step of our customers' workflows, we share our scientific and workflow expertise to help deliver incremental and sustainable improvements to existing customer products and processes. These projects include enhancing product purity and therefore its performance characteristics, improving product packaging and streamlining workflows. Our strategic initiatives include the development of new products in emerging areas of science such as cell and gene therapy. We currently have approximately 1,400 innovation projects with our customers that address process improvements for existing products and potential significant new opportunities for us to support.

We are a strategic partner to a diverse and sophisticated customer base with stringent quality and regulatory demands. Our ability to customize products and processes at scale while meeting these quality and regulatory requirements and the embedded nature of our business model have made us an integral part of our customers' development programs and broader supply chain. We are incorporated in approximately 785 of our customers' master access files ("MAF") and drug master files ("DMF") that are registered with regulatory authorities around the world. Additionally, we are able to meet the exacting quality and regulatory requirements of our advanced technologies & applied materials customers, including semiconductor manufacturers, by providing materials at purity levels as stringent as one part-per-trillion. We have developed long-standing relationships with a global customer base, and generated approximately 36% of our net sales for the year ended December 31, 2019 from customers with whom we have 15+ year relationships. Historically we believe we have served leading participants in each of the industries we serve:



The combination of our innovation centers and manufacturing facilities empowers us to support our customers from the earliest stages of their product innovation to commercial manufacturing, and provides us multiple opportunities to serve as a critical partner to them. Our eleven regional innovation centers located in seven different countries (including five currently operating in the Asia, Middle East and Africa ("AMEA") region), allow us to efficiently support the product development needs of our diverse customer base. In addition, we have 28 manufacturing facilities, 13 of which are cGMP compliant and 12 of which are regulated by the U.S. Food and Drug Administration ("FDA") or comparable foreign regulatory authorities. Led by our globally recognized VWR brand, we have approximately 150 sales and distribution centers strategically located to promote supply chain efficiency, enabling us to deliver orders virtually anywhere in the world, often within 24 to 48 hours. We employ approximately

3,600 sales and sales support professionals around the world who are focused on serving our customers through a local presence. Our professionals' comprehensive industry-specific knowledge is supplemented by our leading online customer platform which affords current and potential customers a rich, informative and customized user experience and allows us to better address a global customer base. Many customers choose to directly integrate their ordering activity with our online platform. We have over 2,700 integrated connections with our customers and over 1,300 integrated connections with our suppliers to simplify and expedite their transactions with us. In 2019, approximately 51% of our revenues came from our digital channels.

In 2019, we recorded net sales of $6,040.3 million, net income of $37.8 million, Adjusted EBITDA of $1,031.2 million and Adjusted Net Income of $373.6 million. Approximately 85% of our net sales were from offerings which we consider to be recurring in nature. In addition, for the twelve months ended September 30, 2020, we have recorded net sales of $6,126.7 million, net income of $135.6 million, Adjusted EBITDA of $1,085.3 million and Adjusted Net Income of $506.5 million. For the definition of Adjusted EBITDA and Adjusted Net Income and reconciliations of these measures from net income or loss, please see "—Summary Historical Financial and Other Data."

Our Competitive Strengths

Our customer-centric business model, combined with our deep understanding of our customers' workflows, allows us to differentiate ourselves in the marketplace and is at the core of our competitive advantage. We believe the following competitive strengths provide the foundation for our position as the partner of choice for mission critical products and services to our customers:

Trusted Partner With Deep Customer Relationships. Our end-to-end integrated workflow platform and our ability to partner at every stage of research, development and commercialization have led to deep, embedded customer relationships. Over 1,300 of our associates are co-located with certain customers, working side-by-side with their scientists every day. We have collaborated with and supported many of our strategic global accounts for decades, and approximately 36% of our net sales for the year ended December 31, 2019 was generated by customers with whom we have maintained relationships for over 15 years. Regardless of company size or development stage, our customers seek a partner with innovative and comprehensive product offerings, superior quality, advanced manufacturing and skilled technical services to support all of their research, development and commercialization needs. Based on our expertise and experience in these areas, we believe we are a critical partner for our customers.

Customized Offerings to Address Our Customers' Evolving Needs. We work closely with our customers to provide highly customized formulations across a variety of workflows. Our customization capabilities span the entire spectrum of core customer requirements, including purity, composition, blending, kitting, form factor, packaging, lot size and specialized certifications. Our ability to rapidly customize and innovate has led to significant adoption of our products as we and our customers seek to improve productivity and establish new processes. Our highly specialized and customized development, manufacturing and servicing capabilities also allow us to continue to pursue customized solutions in emerging and innovative therapeutic areas such as cell and gene therapies.

Depth And Breadth of Product and Service Offerings. Our comprehensive portfolio of materials & consumables, equipment & instrumentation and services & specialty procurement enables us to serve some of the most demanding and challenging areas of science. We offer more than six million distinct products that are often required by our customers in many of their most important processes. Our portfolio includes products valued for their exacting purity and performance specifications, some of which we manufacture to purity levels as stringent as one part-per-trillion. In addition, we offer our customers comprehensive value-added services and innovative services needed in the laboratory. We are dedicated to bringing new digital insights and capabilities to our customers as we collaborate to cultivate the "lab of the future"—a lab capable of generating and digesting vast amounts of data with IoT devices.

Quality and Regulatory Expertise Drives Customer Loyalty. We serve industries that are subject to rigorous quality, performance and reliability regulations. Our customers rely on us to navigate these requirements while also facilitating their innovation and manufacturing efforts. We have submitted

and maintain approximately 785 MAFs and DMFs with the FDA and comparable local regulatory authorities in nine countries, which simplifies our customers' medical product approval processes by allowing them to reference our products as part of their own applications. Our 13 cGMP facilities and 19 ISO-certified distribution facilities create a manufacturing and distribution network that is designed to meet stringent quality and regulatory requirements. Our quality expertise is highly valued, including in semiconductor manufacturing, where customer demands for precision frequently exceed those in pharmaceuticals, biologics and medical devices. Our manufacturing expertise allows us to utilize the same manufacturing line for all stages of development and commercialization thus reducing customer regulatory burdens as their products progress from the laboratory to full scale production. This differentiated approach allows our customers to bring their products to market faster and more efficiently, and allows us to typically maintain our position over the life of the product given the regulatory requirements, as well as the costs and risks involved in substituting our products.

Customer-Centric Innovation Framework. We employ a differentiated innovation model that is informed by our embedded relationships with our customers and enables us to anticipate and align our innovation efforts with our customers' priorities. We take a portfolio approach to our activities and focus on both incremental and breakthrough innovation. We will continue to serve the most successful established and emerging companies through:

- *Proprietary Product Innovations.* We engage with our customers throughout their product lifecycles, including during initial discovery and development activities, to create materials and solutions that meet stringent specifications. We currently have approximately 1,400 innovation projects with our customers that address process improvements for existing products and potential significant new opportunities for us to support.

- *Third-Party Product Innovations.* We are an important channel for thousands of specialized manufacturers of complex and sophisticated scientific products. Because we are already embedded in key customer workflows and are widely trusted among a broad collection of emerging and established suppliers, we are able to accelerate market acceptance and growth of promising third-party innovations.

- *Data and Research Analytics.* We are actively engaged in developing advanced, innovative data integration and analytical solutions to support the vast amounts of data being generated by our customers. By relying on our data capabilities and insights, we will allow our customers to continue to focus on their core competencies while also participating in the benefits derived from analyzing and utilizing data.

Global Scale, Strategic Locations and Specialized Infrastructure. We are strategically located close to our global customers to drive supply chain efficiency, minimize customer lead times and navigate a complex network of regulatory requirements. Our global footprint consists of over 200 facilities located in over 30 countries and allows us to deliver our extensive portfolio of products and services to customers nearly anywhere in the world and generally within 24 to 48 hours. We have the expertise and government licenses to manage multiple controlled environments globally, enabling us to safely and in a compliant manner handle highly regulated chemicals and other materials.

Attractive Financial Profile and Scalable Operating Platform. We believe we have an attractive business model due to our scale, resilient and recurring revenue base, demonstrated operating leverage, and strong cash flow generation. The cost of our products is often a small percentage of the overall cost of our customers' workflow, resulting in a resilient business profile. Additionally, for the year ended December 31, 2019, approximately 85% of our sales were from our materials & consumables and services & specialty procurement offerings which we consider to be recurring. By employing the Avantor Business System ("ABS"), a disciplined approach to continuously unlocking operational efficiencies, we have a demonstrated track record of improving profitability and driving cash flow generation. Our platform is further enhanced by a disciplined approach to M&A that, prior to the VWR Acquisition, historically contributed incremental revenue growth to VWR of approximately 1% to 2% per year by targeting

businesses that enhance our workflow solutions, increase our technical capabilities and extend our global reach.

World-Class Leadership with Proven Ability to Execute at Scale. Our 12-member senior executive team has extensive experience within the life sciences and advanced technologies & applied materials industries globally, and possesses a wide network of industry relationships. Our management team has a proven track record of delivering stable revenue growth, executing on investment plans, achieving margin expansion and driving continuous improvement of global enterprises. Our management team is supported by approximately 12,000 associates around the world who have extensive scientific and commercial experience and enable us to provide our customers with tailored expertise and service.

Our Growth Strategies

We intend to capitalize on our world-class platform and distinctive competitive strengths as we pursue the following growth strategies:

Increase Integration of Our Products and Services Into Customers' Workflows. Our extensive and long-term relationships with our customers and our embedded position in their workflows provide us with unique insights into their activities and understanding of additional products and services that we could offer to them. We translate these insights and understanding, together with our focus on workflows, into a convenient one-stop solution for our customers resulting in a growing volume of business.

Develop New Products and Services. We are continuously expanding our portfolio to provide our customers with additional solutions and further expand our addressable markets. Specifically, we are focusing our efforts to expand our portfolio in:

- *Bioproduction*. We are broadening our range of process ingredients, serums, reagents, excipients, chromatography resins and single-use assemblies for use in the fast-growing bioproduction sector.

- *Custom Manufactured Products*. We are continuing to partner with our customers to create materials and solutions that meet the unique and stringent specifications for their current and future products. We currently have approximately 1,400 customer-directed projects in development at our innovation centers located around the world.

- *New Products in High Growth Areas*. We are working closely with our sales force and our customers' R&D teams to understand emerging technologies and regulatory and industry standards that will become critical workflows in high growth industries. This close coordination with customers allows us to make targeted investments in the development of innovative products and solutions, bringing new products and services to market rapidly.

- *Service Offerings*. We are expanding upon our traditional services, such as specialty procurement, to offer additional innovative, flexible and customized solutions to our global strategic customers. We will continue to expand the scope of our service offerings and increase the complexity, precision and value of our offerings.

- *Digital Capabilities*. As the volume, velocity and variety of data generated by our customers continue to expand, the ability to organize and analyze this data for actionable insight has become increasingly critical to our customers. Based on the insights we gain as strategic partners, we are building a broad suite of technology-enabled offerings tailored to our customers' objectives to increase productivity and effectiveness of their research and manufacturing workflows.

Expand in Geographies Expected to Have Outsized Growth. We are focused on expanding our geographic reach and believe certain emerging economies, including China, Southeast Asia and Eastern Europe, offer a strong opportunity for growth. Local demand for our products and solutions in these regions

is being driven by increasingly stringent quality and regulatory requirements, the expansion of our customers' presence, an inadequate local supplier base and a significant increase in local government investment to support innovation in the industries we serve. We have invested in targeted geographies and intend to capitalize on our local presence and ability to attract new customers and follow existing ones into new geographies.

Continually Enhance Our Global Online Platform. We are continually improving and expanding our multi-lingual online sales platform in order to deliver our complete portfolio of offerings across all workflows. We will focus on enhancing our online platform in order to improve search engine effectiveness, simplify and personalize the user experience though enhancements to our vwr.com website and capture greater wallet share at existing customers and business from new customers. Using advanced analytics, we have also developed digital tools and marketing programs to increase the utility and stickiness of our platform, improve order conversion rates and share better insights with our customers regarding their needs and purchasing behaviors.

Increase Commercial Excellence and Operational Efficiency to Drive Margin Expansion. Operational discipline has been a core business focus at Avantor and VWR historically and continues to be our priority across manufacturing, sales and operational processes. The ABS is fundamental to our operational growth strategy to drive continuous improvement by improving efficiency throughout our supply chain and increasing our overall productivity. This approach will continue to be a key component in our margin expansion plans going forward and will help drive profitability and cash generation.

Pursue Strategic Acquisitions to Expand our Platform. We have a strong track record of successfully identifying, completing and integrating strategic acquisitions. Our broad platform, global infrastructure and diversified customer base allow us to generate growth and operating leverage through such acquisitions. We intend to continue to pursue opportunistic acquisitions in our existing and adjacent customer segments to accelerate our entry into high-growth markets and geographies as well as add capabilities and workflow solutions.

Industry Overview

We operate primarily in the biopharma, healthcare, education & government and advanced technologies & applied materials industries. We estimate our total addressable market within these industries to be approximately $70 billion in the aggregate in 2018. We expect the total addressable market we serve will grow approximately 5% annually from 2018 to 2020. Our customers are sophisticated, science-driven businesses working across highly technical industries that require innovation and adherence to the most demanding technical and regulatory requirements.

The following are some of the market forces affecting our customers and driving growth within our industries:

- **Favorable Demographic and Epidemiologic Trends.** Healthcare demand is increasing rapidly across most of the world, driven principally by aging populations, an increased prevalence of chronic diseases and improved access to healthcare.

- **Strong Funding and Externalization of Drug Discovery.** Research and development ("R&D") activities are accelerating with approximately $200 billion of investment in life sciences being deployed each year by a variety of sources as of 2018, including governments, startups and large pharmaceutical companies. We have seen an increasing trend in R&D outsourcing among both small and large pharmaceutical companies, who are focused on driving efficiencies in their processes and aim to focus on their key strengths and value generating activities.

- **Proliferation of R&D and Development of New Therapeutic Modalities.** The rapid, accelerating pace of scientific innovation in the industries we serve is propelling heightened investment in complex and novel research, including new biologic and therapeutic modalities.

- **Emergence of Biosimilars.** Biosimilars are rapidly emerging alongside small and large molecule drugs. Based on our evaluation of third-party data, we estimate biosimilar sales will exceed $25 billion by 2020.

- **Digital Transformation of Science.** The rapid adoption of technologies such as big data and analytics and cloud based solutions represents a meaningful opportunity to automate and optimize mission critical operations and drive competitive differentiation.

- **Positive Research and Development Trends in Advanced Technologies & Applied Materials.** Continued demand for Internet of Things ("IoT") devices and groundbreaking technological advancements, including artificial intelligence and autonomous cars, are driving demand for improved chip designs that often have smaller feature sizes. These new chips will increase the need for ultra-high purity materials, in higher volumes, that are used in the semiconductor manufacturing processes. In addition, the aerospace & defense industry continues to utilize new technologies and features, which has driven increased spending in this industry.

The following is a summary of the industries we serve:

- **Biopharma.** Our offerings are used by biopharmaceutical companies, biotechnology companies, biosimilar companies, generic drug companies and contract manufacturing organizations ("CMOs") of all sizes to specifically address their development and manufacturing needs during each phase of a drug's lifecycle, from research and development to commercialization. We are well-positioned to support the emerging needs of science, providing solutions for both traditional small molecule sectors and the growing, more complex large molecule sector. We estimate that our addressable portion of the biopharma industry for 2018 was approximately $30 billion and will grow approximately 7% from 2018 to 2020.

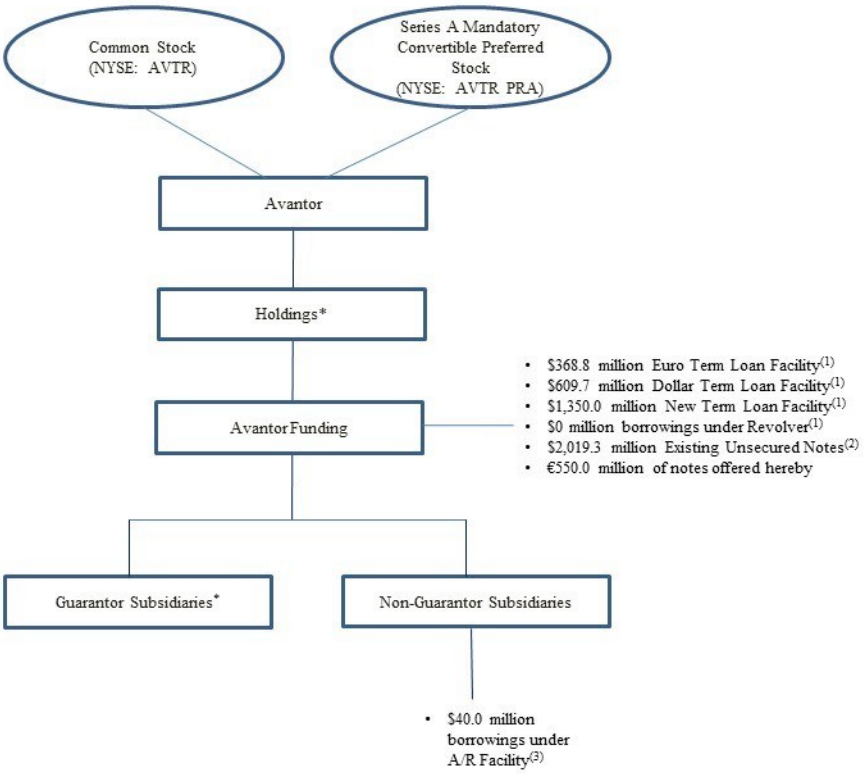
- **Healthcare.** Healthcare consists of medical implants, drug delivery devices, non-implantable devices (the "medical device industry") and diagnostic tools and consumables (the "diagnostics industry"). Our offerings include high-purity silicones used in the manufacture of medical implantable devices, including aesthetic and reconstructive implants, pacemakers and cochlear implants. Our high-purity silicones are also frequently specified into non-implantable medical devices, such as medical-grade tubing, balloons and bladders. Also, we provide medical-grade silicones expertise to customize sustained drug-release devices for our pharmaceutical and biologics customers. We estimate that our addressable portion of the healthcare industry for 2018 was approximately $9 billion and will grow approximately 5% from 2018 to 2020.

- **Education & Government.** The education & government industry consists of government sponsored research across multiple areas of discovery, including basic and applied science. Our offerings are used by academic institutions and government sponsored organizations to address their needs for continued education and testing and research activities that includes areas such as agriculture and environmental. We estimate that our addressable portion of the education & government industry for 2018 was approximately $15 billion and will grow approximately 3% from 2018 to 2020.

- **Advanced Technologies & Applied Materials.** We have a comprehensive product line of solutions and high-purity acids and solvents used in the manufacture of semiconductors and other high precision electronic applications. We also offer an extensive line of specialty space-grade silicone materials to the aerospace & defense industry. These highly customized materials are used in extreme environments, and include adhesives, sealants, coatings and other inputs for various aircraft, satellite and space applications. We estimate that our addressable portion of the advanced technologies & applied materials industry for 2018 was approximately $15 billion and will grow approximately 4% from 2018 to 2020.

Ownership and Corporate Structure

The following chart illustrates the ownership and corporate structure of Avantor and its subsidiaries and the outstanding debt of such entities as of September 30, 2020, after giving effect to the Refinancing Transactions (as defined below). This chart is provided for illustrative purposes only and does not represent all legal entities affiliated with, or all obligations of, the Issuer.



* The Existing Unsecured Notes are, and the notes offered hereby will be, guaranteed on a joint and several basis by Holdings and each of Holdings' direct or indirect wholly-owned domestic subsidiaries (other than the Issuer) that guarantee obligations under the Senior Secured Credit Facilities. All obligations under the Senior Secured Credit Facilities are unconditionally guaranteed by Holdings and Holdings' existing and future direct or indirect material wholly-owned domestic subsidiaries (other than the Issuer, as borrower) subject to customary exceptions.

(1) Represents the outstanding borrowings under the Senior Secured Credit Facilities, consisting of (i) $368.8 million equivalent aggregate principal amount of the Existing Euro Term Loan Facility, (ii) $609.7 million aggregate principal amount of the Existing Dollar Term Loan Facility and (iii) $1,350.0 million aggregate principal amount of the New Term Loan Facility.

In addition, as of September 30, 2020, there were no borrowings outstanding under our Revolver and we would have had $515.0 million of available borrowings thereunder (excluding issued but undrawn letters of credit).

(2) Represents the outstanding aggregate principal amount of the Issuer's 4.625% Senior Notes due 2028 and 3.875% Senior Notes due 2028, which were issued in July 2020. Reflects the U.S. dollar equivalent of the €400.0 million in aggregate principal amount of the 3.875% Senior Notes due 2028. Represents an exchange rate of $1.1733 to €1.00, determined as of September 30, 2020.

(3) As of September 30, 2020, there were no borrowings outstanding under our A/R Facility and we would have had $300.0 million of available borrowings thereunder (excluding issued but undrawn letters of credit). In connection with the Refinancing Transactions, we intend to borrow approximately $40.0 million under the A/R Facility based on the current euro exchange rates. Actual amounts drawn under the A/R Facility, if any, will depend on the euro exchange rate on or about the closing date of this offering.

Avantor Receivables Funding, LLC, the borrower under the A/R Facility, is not a guarantor of the Issuer's existing debt. None of the net proceeds of borrowings under such unrestricted subsidiary debt will be made available to support the operations or satisfy any corporate purposes of Avantor and neither the Issuer nor any of its subsidiaries (other than Avantor Receivables Funding, LLC) is obligated to make payment on the A/R Facility.

Corporate History and Information

Our 115 year legacy began in 1904 with the founding of the J.T. Baker Chemical Company. In 2010, Avantor was acquired by affiliates of New Mountain Capital, LLC ("New Mountain Capital"), our sponsor, from Covidien plc. Since then, we have expanded through a series of large acquisitions across the globe. In 2016, we acquired NuSil, a leading supplier of high-purity silicone products for the medical device industry that was founded in 1985. In 2017, we also acquired VWR, a global manufacturer and distributor of laboratory and production products and services founded in 1852 that now represents the primary ordering platform for our customers. The Issuer was incorporated in Delaware in May 2017 in anticipation of the VWR Acquisition.

Our principal executive offices are located at the Radnor Corporate Center, Building One, Suite 200, 100 Matsonford Road, Radnor, Pennsylvania 19087 and our telephone number is (610) 386-1700. Our website is www.avantorsciences.com. Information contained on our website or that can be accessed through our website is not part of, and is not incorporated by reference in, this offering circular.

Recent Developments

New Term Loan Facility

Concurrently with this offering, we intend to enter into an incremental senior secured term loan facility of approximately $1,350.0 million (the "New Term Loan Facility") under the credit agreement that governs our Senior Secured Credit Facilities. The terms of the New Term Loan Facility have not been finalized at this point, however, it is expected that the maturity date for the New Term Loan Facility will be the date that is seven years after the date of incurrence of the New Term Loan Facility. We intend to use the net proceeds of the New Term Loan Facility, along with the net proceeds of the notes offered hereby, borrowings under the A/R Facility and cash on hand, to redeem the Existing Secured Notes in full and to pay related fees and expenses. We refer to (i) the offering of the notes and the use of proceeds thereof, (ii) the incurrence of the New Term Loan Facility and the use of proceeds thereof and (iii) any borrowings under the A/R Facility as the "Refinancing Transactions." There is no assurance that the New Term Loan Facility will be incurred on the terms proposed, or at all, and the offering of the notes is not conditioned on the completion of the New Term Loan Facility. To the extent the New Term Loan Facility is not consummated, we anticipate we will use the net proceeds of this offering to redeem a portion of the Existing Secured Notes.

The Offering

The summary below describes the principal terms of the notes (as defined below). Some of the terms and conditions described below are subject to important limitations and exceptions. See "Description of Notes" for a more detailed description of the terms and conditions of the notes and the indenture that will govern the notes.

Issuer	Avantor Funding, Inc.
Notes Offered	€550,000,000 aggregate principal amount of % senior first lien notes due 2025.
Maturity	, 2025
Interest	Interest on the notes will accrue at a rate of % per annum, payable semi-annually in arrears on and of each year, commencing , 2021. Interest will accrue from , 2020.
Guarantees	The notes will be fully and unconditionally guaranteed, jointly and severally, on a senior basis by Holdings and each of Holdings' existing and subsequently acquired or organized direct or indirect domestic restricted subsidiaries (other than the Issuer) to the extent such subsidiary guarantees the Senior Secured Credit Facilities. The guarantees of any guarantor will be automatically released in the event such guarantor's guarantee under the Senior Secured Credit Facilities is released (other than in connection with a refinancing or repayment in full of the Senior Secured Credit Facilities). See "Description of Notes—Guarantees."
Security	The notes will be secured on a pari passu first-lien basis by the same assets that secure the Issuer's and each guarantor's obligations under the Senior Secured Credit Facilities, subject to permitted liens and applicable local law limitations. See "Description of Notes—Security for the Notes."
First Lien Intercreditor Agreement	On the issue date, the Notes Collateral Agent will become party to the existing intercreditor agreement, or the "First Lien Intercreditor Agreement," relating to the collateral securing the notes, to which the collateral agent under the Senior Secured Credit Facilities, or the "Bank Collateral Agent," is a party. See "Description of Notes—Security for the Notes—First Lien Intercreditor Agreement."
Ranking	The notes will be the Issuer's and the guarantees will be the guarantors' senior secured obligations and will: • rank equally in right of payment with all of the Issuer's and each guarantor's existing and future senior indebtedness, including indebtedness under the Senior Secured Credit Facilities and the Existing Unsecured Notes; • rank senior in right of payment to all of the Issuer's and each guarantor's existing and future subordinated indebtedness and other

obligations that expressly provide for their subordination to the notes and the guarantees;

- be effectively senior to all existing and future unsecured indebtedness of the Issuer and the guarantors, including the Existing Unsecured Notes, to the extent of the value of the assets securing such indebtedness;

- rank equally in priority as to the collateral securing the notes with respect to borrowings and guarantees under the Senior Secured Credit Facilities and any other existing and future pari passu first lien indebtedness; and

- be structurally subordinated to all existing and future indebtedness and other liabilities of any non-guarantor subsidiaries of the Issuer, including indebtedness under the A/R Facility.

As of September 30, 2020, on an as-adjusted basis after giving effect to the Refinancing Transactions:

- the notes and related guarantees would have ranked effectively senior to approximately $2,019.3 million of unsecured indebtedness, consisting of the Existing Unsecured Notes;

- the notes and related guarantees would have ranked equal to approximately $2,328.5 million of secured indebtedness, consisting of borrowings under the Senior Secured Credit Facilities;

- there would have been additional availability (i) under the Revolver of up to $515.0 million (excluding issued but undrawn letters of credit) and (ii) under the A/R Facility of up to $260.0 million (excluding issued but undrawn letters of credit). The Issuer can also incur additional secured indebtedness if certain specified conditions are met under the credit agreement that governs the Senior Secured Credit Facilities, the indenture that governs the Existing Unsecured Notes and the indenture that will govern the notes offered hereby; and

- excluding the effect of intercompany balances as well as intercompany transactions, after giving effect to the Refinancing Transactions, the non-guarantor subsidiaries of the Issuer accounted for approximately $2,719.6 million, or 44%, of its net sales for the twelve months ended September 30, 2020, and approximately $5,691.7 million, or 57%, of its total assets as of September 30, 2020, and would have accounted for approximately $57.4 million, or 1.1%, of its total gross indebtedness including capital lease obligations as of September 30, 2020.

Optional Redemption ..... The Issuer may redeem some or all of the notes at any time prior to , 2022 at a price equal to 100% of the principal amount of the notes redeemed, plus accrued and unpaid interest on such notes, if any, to, but not including, the redemption date, plus a "make-whole" premium, as described under the heading "Description of Notes—Optional Redemption."

At any time on or after , 2022, the Issuer may redeem some or all of the notes at the applicable redemption prices described under the heading "Description of Notes—Optional Redemption."

Additionally, from time to time prior to , 2022, the Issuer may redeem up to 40% of the aggregate principal amount of the notes at a redemption price equal to % of the principal amount of the notes to be redeemed (i) with an amount equal to or less than the net cash proceeds that we raise in one or more equity offerings, plus (ii) accrued and unpaid interest, if any, to, but not including, the redemption date.

Change of Control ..... Upon the occurrence of certain kinds of changes of control, we must offer to repurchase the notes at a redemption price equal to 101% of the principal amount thereof plus any accrued and unpaid interest to, but not including, the repurchase date. See "Description of Notes—Repurchase at the Option of the Holders—Change of Control."

We may not be able to pay you the required price for notes you present to us at the time of a change of control, because:

- we may not have enough funds at that time; or
- the terms of our indebtedness under the Senior Secured Credit Facilities may prevent us from making such payment.

See "Risk Factors—Risks Related to our Indebtedness and the Notes—The Issuer may not be able to repurchase the notes upon a Change of Control required by the indenture that will govern the notes."

Certain Covenants ..... The indenture that will govern the notes will contain covenants that, among other things, will limit the Issuer's ability and the ability of the Issuer's restricted subsidiaries to:

- incur additional debt or issue certain preferred shares;
- incur liens or use assets as security in other transactions;
- make certain distributions, investments and other restricted payments;
- engage in certain transactions with affiliates; and
- merge or consolidate or sell, transfer, lease or otherwise dispose of all or substantially all of our assets.

These covenants are subject to important exceptions and qualifications as described under the heading "Description of Notes—Certain Covenants."

Many of these covenants will cease to apply to the notes during any time that the notes have investment grade ratings from any two of Moody's Investors Service, Inc., or "Moody's," and Standard & Poor's Ratings Services, or "S&P," and Fitch, Inc., or "Fitch," and no default has occurred and is continuing under the indenture that will govern the notes. See "Description of Notes—Certain Covenants—Covenant Suspension."

Transfer Restrictions; No Registration Rights	The notes and the guarantees have not been registered under the Securities Act or any state or other securities laws, and we are under no obligation to so register the notes. The notes will be subject to restrictions on transfer and may not be offered or sold except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, except that holders will not be permitted to transfer the notes in reliance on Rule 144 even after the applicable holding period has been satisfied. See "Transfer Restrictions." We do not intend to issue registered notes and guarantees in exchange for the notes and the guarantees to be placed in this offering, and the absence of registration rights may adversely impact the transferability of the notes. See "Risk Factors— Risks Related to our Indebtedness and the Notes—Holders of the notes will not be entitled to registration rights, and the Issuer does not currently intend to register the notes under applicable securities laws. There are restrictions on your ability to transfer and resell the notes without registration under applicable securities laws."
No Prior Market	The notes will be new securities for which there is currently no market. Although the initial purchasers have informed us that they intend to make a market in the notes, they are not obligated to do so, and they may discontinue market making activities at any time without notice. Accordingly, we cannot assure you that a liquid market for the notes will develop or, if such a market develops, that it will be maintained.
Listing	The Issuer intends to apply to list the notes on the Official List of the Exchange within a reasonable period of time following the issue date of such notes. The Exchange is not a regulated market for purposes of MiFID II. The listing application will be subject to approval by the Authority. There can be no assurance that the application to list the notes on the Official List of the Exchange will be approved. Consummation of the offering of the notes is not conditioned on our making an application or obtaining such listing or admission to trading.
Denominations	Minimum denominations of €100,000 and integral multiples of €1,000 in excess thereof.
Use of Proceeds	The Issuer intends to use the net proceeds from the notes offered hereby, along with the net proceeds from the New Term Loan Facility, borrowings under the A/R Facility and cash on hand, to redeem the Existing Secured Notes in full and to pay related fees and expenses. Certain of the initial purchasers and/or their affiliates may be holders of the Existing Secured Notes, which we intend to redeem in full with the proceeds of this offering. Accordingly, such initial purchasers and/or their affiliates may receive a portion of the proceeds from this offering of the notes in their capacities as holders of the Existing Secured Notes. To the extent the New Term Loan Facility is not consummated, we anticipate we will use the net proceeds of this offering to redeem a portion of the Existing Secured Notes. See "Use of Proceeds" and "Plan of Distribution."
Trustee and Notes Collateral Agent	The Bank of New York Mellon Trust Company, N.A.
Paying Agent	The Bank of New York Mellon, London Branch

Registrar.....	The Bank of New York Mellon Trust Company, N.A.
Listing Agent.....	Carey Olsen Corporate Finance Limited.
Governing Law	The governing law for the notes and the indenture will be New York.
Risk Factors	Investing in the notes involves risks. You should consider carefully the information set forth in "Risk Factors" and all other information contained in or incorporated by reference in this offering circular before deciding to invest in the notes.

Summary Historical Financial and Other Data

The following tables set forth our summary historical consolidated financial data as of the dates and for the periods indicated. The summary historical consolidated financial data as of December 31, 2018 and December 31, 2019 and for the years ended December 31, 2017, December 31, 2018 and December 31, 2019 is derived from our audited consolidated financial statements and related notes thereto incorporated by reference in this offering circular. The summary historical consolidated balance sheet data as of December 31, 2017, is derived from our audited consolidated financial statements and related notes thereto not included or incorporated by reference in this offering circular. The summary historical condensed consolidated financial data as of September 30, 2020 and for the nine months ended September 30, 2019 and 2020 is derived from our unaudited condensed consolidated financial statements and related notes thereto incorporated by reference in this offering circular. The unaudited condensed consolidated financial statements have been prepared on the same basis as our audited consolidated financial statements and, in the opinion of our management, reflect all normal recurring adjustments necessary for the fair presentation of our consolidated results for these periods. The results for any interim period are not necessarily indicative of the results that may be expected for the full year. Additionally, our historical results are not necessarily indicative of the results expected for any future period.

We have also presented summary unaudited consolidated financial data for the twelve-month period ended September 30, 2020, which does not comply with GAAP. This data has been calculated by subtracting the unaudited statement of operations and cash flow data for the nine-month period ended September 30, 2019 from the audited statement of operations and cash flow data for the year ended December 31, 2019 and then adding the unaudited statement of operations and cash flow data for the nine-month period ended September 30, 2020 incorporated by reference in this offering circular. We have presented this financial data because we believe it provides our investors with useful information to assess our recent performance.

In accordance with GAAP, we have included the financial results of VWR since the VWR Acquisition on November 21, 2017. For more information about this basis of presentation, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 1 to the audited annual financial statements in our Annual Report and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 1 to the unaudited condensed consolidated financial statements in our Quarterly Reports, each of which is incorporated by reference in this offering circular.

You should read the information contained in this table in conjunction with "Capitalization" included in this offering circular, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our audited consolidated financial statements and the accompanying notes thereto in our Annual Report and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our unaudited condensed consolidated financial statements and related notes thereto in our Quarterly Reports, each of which is incorporated by reference in this offering circular.

	Year ended December 31,			Nine months ended September 30,		Twelve months ended September 30,
(in millions)	**2017**	**2018**	**2019**	**2019**	**2020**	**2020**
Statement of operations data						
Net sales	$ 1,247.4	$ 5,864.3	$ 6,040.3	$ 4,516.3	$ 4,602.7	$ 6,126.7
Cost of sales	814.6	4,044.5	4,119.6	3,076.0	3,103.8	4,147.4
Gross profit	432.8	1,819.8	1,920.7	1,440.3	1,498.9	1,979.3
Selling, general and administrative expenses	449.7	1,405.3	1,368.9	1,040.4	996.7	1,325.2
Fees to New Mountain Capital (1)	193.5	1.0	—	—	—	—
Operating (loss) income	(210.4)	413.5	551.8	399.9	502.2	654.1
Interest expense	(200.9)	(523.8)	(440.0)	(342.0)	(251.8)	(349.8)
Loss on extinguishment of debt	(56.4)	—	(73.7)	(70.2)	(226.4)	(229.9)
Other income (expense), net	7.5	(3.5)	2.5	2.9	11.6	11.2
(Loss) income before income taxes	(460.2)	(113.8)	40.6	(9.4)	35.6	85.6
Income tax benefit (expense)	314.9	26.9	(2.8)	(23.4)	29.4	50.0
Net (loss) income	(145.3)	(86.9)	37.8	(32.8)	65.0	135.6
Net loss attributable to noncontrolling interests	(32.6)	—	—	—	—	—

(in millions)	Year ended December 31, 2017	2018	2019	Nine months ended September 30, 2019	2020	Twelve months ended September 30, 2020
Net (loss) income attributable to Avantor, Inc.	(112.7)	(86.9)	37.8	(32.8)	65.0	135.6
Accumulation of yield on preferred stock	(27.8)	(269.5)	(152.5)	(136.4)	(48.4)	(64.5)
Adjustment of preferred stock to redemption value	(274.4)	—	(220.4)	(220.4)	—	—
Net (loss) income available to common stockholders of Avantor, Inc.	$ (414.9)	$ (356.4)	$ (335.1)	$ (389.6)	$ 16.6	$ 71.1

(Dollars in millions)	Year ended December 31, 2017	2018	2019	Nine months ended September 30, 2019	2020	Twelve months ended September 30, 2020
Balance sheet data (as of period end)						
Cash and cash equivalents	$ 185.4	$ 184.7	$ 186.7		$ 370.5	
Total assets	10,446.5	9,911.6	9,773.3		9,938.4	
Total long-term debt, including current portion	7,117.8	6,924.7	5,116.5		5,070.9	
Total liabilities	9,476.9	9,104.0	7,311.1		7,386.1	
Total redeemable equity	3,589.8	3,859.3	—		—	
Total stockholders' (deficit) equity	(2,620.2)	(3,051.7)	2,462.2		2,552.3	
Cash flow data						
Net cash (used in) provided by operating activities	$ (167.5)	$ 200.5	$ 354.0	$ 267.0	$ 623.8	$ 710.8
Net cash used in investing activities	(6,676.0)	(23.2)	(42.1)	(30.7)	(40.3)	(51.7)
Net cash provided by (used in) financing activities	6,965.0	(170.3)	(307.8)	(240.4)	(402.5)	(469.9)
Other data						
Adjusted EBITDA(2)	$ 289.5	$ 945.3	$ 1,031.2	$ 767.6	$ 821.7	$ 1,085.3
Consolidated EBITDA(2)(3)		994.1	1,089.1	1,067.8	1,131.7	1,131.7
Adjusted Net Income(2)	67.4	232.9	373.6	253.6	386.5	506.5
Adjusted Net Leverage(2)		7.0x	4.6x	4.8x	4.2x	4.2x

(1) Represents transaction fees paid to New Mountain Capital. Pursuant to the terms of their advisory agreement with us, in 2017 New Mountain Capital earned a fee equal to 2% of the value of a debt refinancing and the VWR Acquisition. This advisory agreement was terminated upon consummation of the IPO.

(2) We define Adjusted EBITDA as net income or loss exclusive of interest expense, income tax expense, depreciation, amortization and certain other adjustments that we do not consider in our evaluation of our ongoing operating performance from period to period as discussed further below. We believe Adjusted EBITDA is frequently used by analysts, investors and other interested parties to evaluate companies in our industry and is a helpful supplemental measure to provide additional insight in evaluating a company's core operational performance as it excludes costs that do not relate to the underlying operation of their business.

We define Consolidated EBITDA as Adjusted EBITDA further adjusted to reflect items that are generally permitted in calculating covenant compliance under the indentures that govern the Existing Notes and the credit agreement that governs the Senior Secured Credit Facilities. We describe these adjustments reconciling Adjusted EBITDA to Consolidated EBITDA in the table below. We believe Consolidated EBITDA is frequently used by analysts, investors and other interested parties to evaluate companies in our industry and is a helpful supplemental measure to provide additional insight in evaluating a company's performance as it further includes cost savings that are expected to occur.

We define Adjusted Net Income as net income or loss exclusive of amortization as further adjusted to eliminate the impact of certain costs related to the IPO, our reorganization and other items that we do not consider in our evaluation of our ongoing operating performance from period to period as discussed further below. We believe Adjusted Net Income is useful to investors as a way to analyze the underlying trends in our core business consistently across the periods inclusive of interest and depreciation.

We define Adjusted Net Leverage as gross debt, reduced by our cash and cash equivalents, divided by our trailing 12-month Adjusted EBITDA (excluding stock-based compensation expense and including the run-rate effect of synergies). We believe Adjusted Net Leverage is useful to investors as a way to evaluate and measure the Company's capital allocation strategies and the underlying trends in the business.

Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage are non-GAAP measures of our financial performance and should not be considered as alternatives to net income or loss as a measure of financial performance, or any other performance measure derived in accordance with GAAP, nor should it be construed as an inference that our future results

will be unaffected by unusual or other items. Additionally, Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage are not intended to be measures of free cash flow for management's discretionary use, as they do not reflect certain cash requirements such as tax payments, debt service requirements, capital expenditures and certain other cash costs that may recur in the future. Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage contain certain other limitations, including the failure to reflect our cash expenditures, cash requirements for working capital needs and cash costs to replace assets being depreciated and amortized. Management compensates for these limitations by relying on our GAAP results in addition to using Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage. Our presentation of Adjusted EBITDA, Consolidated EBITDA, Adjusted Net Income and Adjusted Net Leverage is not necessarily comparable to other similarly titled captions of other companies due to different methods of calculation.

The following table sets forth a reconciliation of net income or loss, the most directly comparable GAAP performance measure, to Adjusted EBITDA and Adjusted Net Income, using data derived from our consolidated financial statements, in each case for the periods indicated:

	Year ended December 31,			Nine months ended September 30,		Twelve months ended September 30,
(in millions)	2017	2018	2019	2019	2020	2020
Net (loss) income	$ (145.3)	$ (86.9)	$ 37.8	$ (32.8)	$ 65.0	$ 135.6
Amortization(a)	65.2	321.3	312.3	234.8	233.4	310.9
Net foreign currency loss (gain) from financing activities(b)	5.5	6.5	1.9	0.1	(4.3)	(2.5)
Gain on derivative instruments(c)	(9.6)	—	—	—	—	—
Other stock-based compensation expense (benefit)(d)	26.6	(0.7)	36.8	33.5	0.6	3.9
Loss on extinguishment of debt(e)	56.4	—	73.7	70.2	226.4	229.9
Restructuring and severance charges(f)	29.6	81.2	24.3	19.8	6.7	11.2
Purchase accounting adjustments(g)	41.8	(1.0)	(10.7)	(7.2)	—	(3.5)
Transaction fees to New Mountain Capital(h)	192.5	—	—	—	—	—
VWR transaction, integration and planning expenses(i)	73.7	36.2	22.5	16.8	7.2	12.9
Adjustment for U.S. tax reform(j)	(126.7)	(27.3)	—	—	—	
Other(k)	33.1	8.5	3.2	0.2	4.3	7.3
Income tax benefit applicable to pretax adjustments(1)	(175.4)	(104.9)	(128.2)	(81.8)	(152.8)	(199.2)
Adjusted Net Income	67.4	232.9	373.6	253.6	386.5	506.5
Interest expense(a)	200.9	523.8	440.0	342.0	251.8	349.8
Depreciation(a)	34.0	83.3	86.6	66.8	60.0	79.8
Income tax (benefit) provision applicable to Adjusted Net Income(m)	(12.8)	105.3	131.0	105.2	123.4	149.2
Adjusted EBITDA	$ 289.5	$ 945.3	$ 1,031.2	$ 767.6	$ 821.7	$ 1,085.3

(a) Represents amounts as determined under GAAP.

(b) Represents remeasurement of various foreign-denominated borrowings into functional currencies. Our U.S. subsidiaries carry a significant amount of euro-denominated debt, and many of our subsidiaries borrow and lend with each other in foreign currencies. Through July 11, 2019, the foreign currency losses were primarily caused by unhedged intercompany loans receivable ranging from €190 million and €795 million.
On July 11, 2019, we completed an intercompany recapitalization that is intended to mitigate substantially all of our net euro financing exposure in future periods. We still expect to record gains and losses related to intercompany borrowings denominated in other currencies. Historically, the remeasurement of borrowings denominated in currencies other than the euro has not been material.

(c) Represents the realized gain on foreign currency forward contracts used to partially hedge pre-acquisition changes in the value of VWR's euro-denominated loans.

(d) Represents expenses primarily related to remeasuring standalone appreciation rights at fair value on a recurring basis, the vesting of performance stock options with the completion of our IPO and the modification of stock-based awards caused by the legal entity restructuring in November 2017.

(e) Represents the write-off of unamortized deferred financing fees and, additionally in 2017, a $9.6 million payment of a call premium, each incurred as a result of refinancing our outstanding indebtedness or making significant prepayments on our term loans, and which were otherwise classified as interest expense in our prior presentation of Adjusted EBITDA. As a result of a loss on extinguishment of debt of $73.7 million in 2019, we determined it was appropriate to include this as an addition to Adjusted Net Income, and also to include the related 35% tax effect in the income tax benefit applicable to pretax adjustments. While Adjusted Net Income was impacted by this reclassification of adjustments, there was no change to the amount of 2017 Adjusted EBITDA.

(f) The following table presents restructuring and severance charges by plan:

	Year ended December 31,			Nine months ended September 30,		Twelve months ended September 30,
(in millions)	2017	2018	2019	2019	2020	2020
2017 restructuring	$ 17.5	$ 78.3	$ 23.0	$ 19.1	$ 6.1	$ 10.0
Other	12.1	2.9	1.3	0.7	0.6	1.2
Total	$ 29.6	$ 81.2	$ 24.3	$ 19.8	$ 6.7	$ 11.2

Other includes three smaller plans for VWR, NuSil and legacy Avantor and other non-plan initiatives.

(g) Represents reversals of the short-term impact of purchase accounting adjustments on earnings. The most significant adjustment in 2017 was an increase to cost of sales that resulted from valuing VWR's inventory at fair value in purchase accounting. The most significant adjustment in 2019 was a normalization of expense for prepaid customer rebates that were derecognized in purchase accounting.

(h) Represents transaction fees paid to New Mountain Capital. Pursuant to the terms of their advisory agreement with us, in 2017 New Mountain Capital earned a fee equal to 2% of the value of a debt refinancing and the VWR Acquisition. See "Certain Relationships and Related Party Transactions."

(i) Represents direct expenses incurred to consummate the VWR Acquisition and other expenses incurred related to the planning and integration of VWR.

(j) Represents the accounting effects of tax reform legislation enacted in the United States. In 2017, we recognized a provisional one-time income tax benefit of $126.7 million, consisting of a $285.5 million benefit caused by the remeasurement of our deferred tax assets and liabilities at the new corporate tax rate, offset in part by a $158.8 million expense caused by the one-time transition tax on our accumulated foreign undistributed earnings and profits. In 2018, we finalized our provisional accounting for U.S. tax reform, which included interpreting new transition tax regulations issued in 2018. In connection with finalizing our provisional accounting, we recognized a further income tax benefit of $27.3 million, consisting of a $48.8 million benefit related to the one-time transition tax, offset in part by an expense of $21.5 million related to deferred tax remeasurement. During the preparation of our third quarter 2019 results, we concluded that it was more appropriate to remove the impact of these one-time benefits from U.S. tax reform in the calculation of Adjusted Net Income, and reclassify such impact as an increase to the income tax benefit provision applicable to Adjusted Net Income. As a result, Adjusted Net Income for 2017 and 2018 was reduced by $126.7 million (offset by adjustments for debt extinguishment net of the related tax effect) and $27.3 million, respectively, but there were no changes to the amounts of 2017 and 2018 Adjusted EBITDA.

(k) The following table presents the components of other:

	Year ended December 31,			Nine months ended September 30,		Twelve months ended September 30,
(in millions)	2017	2018	2019	2019	2020	2020
Unconsummated equity offering	$ 19.9	$ —	$ —	$ —	$ —	$ —
NuSil-related integration expenses	5.1	—	—	—	—	—
Executive departures	—	4.5	—	—	—	—
Impairment charges	5.0	2.9	—	0.2	—	—
Debt refinancing fees	3.1	—	—	—	—	—
Other transaction expenses	—	1.1	3.2	—	4.3	7.3
Total	$ 33.1	$ 8.5	$ 3.2	$ 0.2	$ 4.3	$ 7.3

(l) Represents the income tax benefit associated with the reconciling items between net income or loss and Adjusted Net Income. To determine the aggregate tax effect of the reconciling items, we utilized statutory income tax rates ranging from 0% and 35%, depending upon the applicable jurisdictions of each adjustment.

(m) Represents the difference between income tax expense or benefit as determined under GAAP and the income tax benefit applicable to pretax adjustments.

The following table sets forth a reconciliation of Consolidated EBITDA and Adjusted Net Leverage, using data derived from our consolidated financial statements, in each case as of the twelve month periods indicated:

	December 31,		September 30,	
(Dollars in millions)	**2018**	**2019**	**2019**	**2020**
Total debt, gross	$ 7,162.9	$ 5,249.4	$ 5,272.9	$ 5,155.5
Less: cash and cash equivalents	(184.7)	(186.7)	(173.9)	(370.5)
Total	6,978.2	5,062.7	5,099.0	4,785.0
Trailing twelve months Adjusted EBITDA	945.3	1,031.2	1,003.3	1,085.3
Trailing twelve months stock-based compensation expense	19.1	31.1	28.3	38.0
Pro forma adjustment for projected synergies(a)	29.7	26.8	36.2	8.4
Consolidated EBITDA	994.1	1,089.1	1,067.8	1,131.7
Adjusted Net Leverage	7.0x	4.6x	4.8x	4.2x

(a) Represents additional projected annualized cost synergies (above and beyond what is already included in our historical results) that we believe would be generated as a result of the actions we have taken as of the periods presented in respect of the global value capture program.

(3) Represents Consolidated EBITDA for the twelve months ended for each period shown.

RISK FACTORS

Investing in the notes involves risks. You should carefully consider the risks described below, together with the other information in this offering circular or incorporated by reference herein, including the risks and uncertainties discussed under the section "Summary—Summary Historical Financial and Other Data" included in this offering circular, the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited financial statements and the notes thereto in our Annual Report and the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the unaudited condensed consolidated financial statements and related notes thereto in our Quarterly Reports, each of which is incorporated by reference herein, before deciding to purchase any notes. The scale and scope of the COVID-19 pandemic may heighten the potential adverse effects on our business, operating results, cash flows and/or financial condition described in the risk factors contained in our Annual Report and Quarterly Reports. If any of the risks described below actually occur, our business, financial condition, results of operations or prospects could be materially adversely affected. In any such case, you may lose all or part of your investment in the notes.

Risks Related to Our Indebtedness and the Notes

The scale and scope of the recent COVID-19 outbreak and resulting pandemic is unknown and is expected to adversely impact our business at least for the near term. The overall impact on our business, operating results, cash flows and/or financial condition could be material.

In December 2019, a novel coronavirus disease was reported and in January 2020, the WHO declared COVID-19 a Public Health Emergency of International Concern. On February 28, 2020, the WHO raised its assessment of the COVID-19 threat from high to very high at a global level due to the continued increase in the number of cases and affected countries, and on March 11, 2020, the WHO characterized COVID-19 as a pandemic.

The COVID-19 pandemic has adversely affected global economies, financial markets and the overall environment in which we do business, and the extent to which it may impact our future results of operations and overall financial performance remains uncertain. For a discussion of the impact the COVID-19 pandemic had on our business, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Quarterly Reports, which are incorporated by reference herein. In addition, the scale and scope of the COVID-19 pandemic may heighten the potential adverse effects on our business, operating results, cash flows and/or financial condition described in the risk factors contained in our Annual Report, including the impact of:

- Significant interruptions in the operations of our manufacturing or distribution centers and logistics providers for the reasons described below;
- Global and regional economic and political conditions on our production, supply chain, the overall demand for our products and the ability of our customers to purchase and/or pay for our products as a result of the pandemic's impact on them; Our ability to develop and produce new products and services in an effort to address medical and other requirements as a result of the pandemic;
- Changes in laws, regulations and regulatory requirements;
- Limitations on our ability to enforce legal rights and remedies with third parties or partners outside the United States;
- The risk of regulatory enforcement actions, product defects or claims thereof;
- Our ability to pursue our growth strategies;
- Our ability to pursue strategic acquisitions;
- Changes within the industries that we serve;

- Our ability to access raw materials for use in the products we manufacture; and

- The potential loss of customers or a reduction in orders from a significant number of customers.

In addition, COVID-19 is adversely affecting, and is expected to continue to adversely affect, certain elements of our business (including certain elements of our operations, supply chains and distribution systems) as a result of impacts associated with preventive and precautionary measures that we, other businesses, our communities and governments are taking. In an effort to halt the outbreak of COVID-19, countries throughout the world, including the United States, most European Union member states, the United Kingdom, India and China, have placed significant restrictions on travel and many businesses have announced extended closures. These restrictions extend to a number of locations where we have significant operations and include shelter in place or stay-at-home orders that require our employees in that area to work from home and avoid unnecessary travel. In addition to existing travel restrictions, jurisdictions may continue to close borders, impose prolonged quarantines and further restrict travel and business activity, which could significantly impact our ability to support our operations and customers, the ability of our employees to get to their workplaces to produce products and provide services and the availability of raw materials for production of our products, as well as significantly hamper our products from moving through the supply chain.

Further, in connection with the global outbreak and spread of COVID-19 and in an effort to increase the wider availability of needed medical and other supplies and products, we may elect to, or governments may require us to, allocate our products (for example pursuant to the U.S. Defense Production Act) in a way that adversely affects our regular operations and financial results, results in differential treatment of customers and/or adversely affects our reputation and customer relationships. In addition, unpredictable increases in demand for certain of our products could exceed our capacity to meet such demand, which could adversely affect our financial results and customer relationships and result in negative publicity.

The duration and extent of the impact from the COVID-19 pandemic depends on future developments that cannot be accurately predicted at this time, such as the severity and transmission rate of the virus, the extent and effectiveness of containment actions and the impact of these and other factors on our employees, customers, suppliers and partners. Such impact on our business, operating results, cash flows and/or financial condition could be material.

The Issuer has a substantial amount of indebtedness which could adversely affect the Issuer's financial condition, and prevent the Issuer from fulfilling its obligations under the notes. In addition, the value of the rights of holders of the notes to the Collateral (as defined herein) may be reduced by any increase in the indebtedness secured by the Collateral.

After completion of this offering, the Issuer will have a substantial amount of indebtedness, which requires us to make significant interest and principal payments. On an as-adjusted basis after giving effect to the Refinancing Transactions, the Issuer and the Issuer's subsidiaries would have had approximately $5,108.4 million of indebtedness as of September 30, 2020, including the notes offered hereby, and estimated cash interest for the twelve months ended September 30, 2020 would have been approximately $182.4 million. On an as-adjusted basis after giving effect to the Refinancing Transactions, the Issuer would also have had an additional $515.0 million available for borrowing under the Revolver (excluding issued but undrawn letters of credit) and an additional $260.0 million would have been available for borrowing under the A/R Facility.

The Issuer's substantial level of indebtedness could have important consequences to us and to the holders of the notes, including the following:

- making it more difficult for us to satisfy our obligations with respect to the notes and or other debt;

- exposing us to the risk of increased interest rates as certain of our borrowings, including borrowings under our Senior Secured Credit Facilities, are at variable rates of interest, which could further adversely impact our cash flows;

- restricting us from making strategic acquisitions or causing us to make non-strategic divestitures;

- requiring us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, which would reduce the funds available for working capital, capital expenditures, investments, acquisitions and other general corporate purposes;

- limiting our flexibility in planning for, or reacting to, changes in our business, future business opportunities and the industry in which we operate;

- placing us at a competitive disadvantage compared to any of our less leveraged competitors;

- increasing our vulnerability to a downturn in our business and both general and industry-specific adverse economic conditions; and

- limiting our ability to obtain additional financing at a favorable cost of borrowing, or at all, or to dispose of assets to raise funds, to fund future working capital, capital expenditures, investments, acquisitions or other general corporate requirements.

The Issuer and the Issuer's subsidiaries may be able to incur substantial additional indebtedness in the future, subject to the restrictions contained in the Senior Secured Credit Facilities, the indenture that governs the Existing Unsecured Notes and the indenture that will govern the notes offered hereby. To the extent the Issuer and the Issuer's subsidiaries incur further indebtedness, the substantial risks related to the Issuer's level of indebtedness would increase. If the Issuer incurs any additional indebtedness that ranks equally with the notes, the holders of that debt will be entitled to share ratably with such holders in any proceeds distributed in connection with any insolvency, liquidation, reorganization, dissolution or other winding up of the company, subject to any collateral arrangements. This may have the effect of reducing the amount of proceeds paid to you. To the extent the Issuer and the Issuer's subsidiaries incur further indebtedness, the substantial risks related to the Issuer's level of indebtedness would increase. See "Description of Notes."

The Issuer's ability to meet expenses, to remain in compliance with its covenants under such debt instruments and to make future principal and interest payments in respect of the Issuer's debt depends on, among other things, the Issuer's operating performance, competitive developments and financial market conditions, all of which are significantly affected by financial, business, economic and other factors. The Issuer is not able to control many of these factors. Given current industry and economic conditions, the Issuer's cash flow may not be sufficient to allow the Issuer to pay principal and interest on its debt, including the notes, the Senior Secured Credit Facilities, and the Existing Unsecured Notes, and meet its other obligations.

Due to many factors beyond the Issuer's control, including as a result of the impact of COVID-19, the Issuer may not have sufficient cash flows from operating activities to service all of the Issuer's indebtedness, including the notes, the Senior Secured Credit Facilities and the Existing Unsecured Notes, and meet the Issuer's other ongoing liquidity needs, and it may be forced to take other actions to satisfy the Issuer's obligations under its debt agreements, which may not be successful.

The Issuer's ability to make payments on and to refinance its indebtedness, including the notes, the Senior Secured Credit Facilities and the Existing Unsecured Notes, will depend on its ability to generate cash in the future. The Issuer's ability to generate cash will be subject to general economic, financial, competitive, legislative, regulatory and other factors, some of which are beyond the Issuer's control, such as the disruption caused by the COVID-19 pandemic. The Issuer's future cash flow, cash on hand or available borrowings may not be sufficient to meet such obligations and commitments. If the Issuer is unable to generate sufficient cash flow from operations in the future to service its indebtedness and to meet its other commitments, the Issuer will be required to adopt one or more alternatives, such as refinancing or restructuring the Issuer's indebtedness (including the notes), selling material assets or operations or seeking to raise additional debt or equity capital. These actions may not be effected on a timely basis or on satisfactory terms or at all, or these actions may not enable us to continue to satisfy the Issuer's capital requirements. In addition, the Issuer's existing or future debt agreements contain and will contain restrictive covenants that may prohibit us from adopting any of these alternatives. The Issuer's failure to comply

with these covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all its debts. See "Description of Notes."

In addition, the Issuer conducts substantially all of its operations through its subsidiaries, certain of which will not be issuers or guarantors of the notes or its other indebtedness. Accordingly, repayment of such indebtedness, including the notes, will be dependent in part on the generation of cash flow by its subsidiaries and their ability to make such cash available to us, by dividend, debt repayment or otherwise. Unless they are guarantors of the notes, the Senior Secured Credit Facilities, the Existing Unsecured Notes or such other indebtedness, the subsidiaries will not have any obligation to pay amounts due on the notes, the Senior Secured Credit Facilities, the Existing Unsecured Notes or such other indebtedness, as applicable, or to make funds available for that purpose. The Issuer's subsidiaries may not be able to, or may not be permitted to, make distributions to enable us to make payments in respect of the Issuer's indebtedness, including the notes. Each subsidiary is a distinct legal entity, and under certain circumstances legal and contractual restrictions may limit the Issuer's ability to obtain cash from the Issuer's subsidiaries. While the indenture that governs the Existing Unsecured Notes, the credit agreement that governs the Senior Secured Credit Facilities and the agreements governing certain of our other indebtedness limit, and the indenture that will govern the notes will limit, the ability of certain of the Issuer's subsidiaries to incur consensual restrictions on their ability to pay dividends or make other intercompany payments to the Issuer, these limitations are, in the case of our existing debt, and will be, in the case of the notes offered hereby, subject to certain qualifications and exceptions. In the event that the Issuer does not receive distributions from its subsidiaries, the Issuer may be unable to make the required principal and interest payments on the Issuer's indebtedness, including the notes.

If the Issuer cannot make scheduled payments on its debt, the Issuer will be in default, and as a result, holders of the notes and certain of its other indebtedness could declare all outstanding principal and interest to be due and payable, the lenders under the Senior Secured Credit Facilities could foreclose against the assets securing the borrowings under such agreements and the Issuer could be forced into bankruptcy or liquidation, which, in each case, could result in your losing all or a portion of your investment in the notes.

A significant portion of our net sales and assets are derived from entities that will not be guarantors of the notes. The notes and the guarantees will be structurally subordinated to all liabilities of the Issuer's non-guarantor subsidiaries.

From and after the consummation of this offering, the notes offered hereby will be guaranteed on a senior unsecured basis by Holdings and all of Holdings' existing and future domestic subsidiaries to the extent each such subsidiary guarantees the Senior Secured Credit Facilities. However, the guarantee of the notes by a subsidiary will be automatically released under certain circumstances. See "Description of Notes—Guarantees." In addition, the indenture that governs the Existing Unsecured Notes permits, and the indenture that will govern the notes offered hereby will permit, the Issuer's subsidiaries, including the Issuer's non-guarantor subsidiaries, to incur certain additional indebtedness, and will not limit their ability to incur trade payables and similar liabilities that are not considered indebtedness thereunder.

You will not have any claim as a creditor against any of the Issuer's non-guarantor subsidiaries. Furthermore, in the event that any non-guarantor subsidiary becomes insolvent or is liquidated, reorganized or dissolved, the assets of such non-guarantor subsidiary will be used first to satisfy the claims of its creditors, including trade creditors, banks and other lenders, followed by claims of any holders of preferred stock of such non-guarantor subsidiary. Only the residual equity value will be available to us and the Issuer's guarantors, and only to the extent the Issuer or any guarantor is a parent company of such non-guarantor subsidiary. Consequently, each guarantee of the notes will be structurally subordinated to claims of creditors of non-guarantor subsidiaries. In the event of a bankruptcy, liquidation or dissolution of any non-guarantor subsidiaries, holders of their debt, including their trade creditors, secured creditors and creditors holding indebtedness or guarantees issued by those subsidiaries, are generally entitled to payment on their claims from assets of those subsidiaries before any assets are made available for distribution to us.

Excluding the effect of intercompany balances as well as intercompany transactions, after giving effect to the Refinancing Transactions, the non-guarantor subsidiaries of the Issuer accounted for approximately $2,719.6

million, or 44%, of its net sales for the twelve months ended September 30, 2020, and approximately $5,691.7 million, or 57%, of its total assets as of September 30, 2020, and would have accounted for approximately $57.4 million, or 1.1%, of its total gross indebtedness including capital lease obligations as of September 30, 2020.

There are circumstances other than repayment or discharge of the notes under which the guarantees will be released automatically, without your consent or the consent of the trustee.

Under various circumstances, the guarantees of the notes will be released automatically. The guarantee of a guarantor of the notes will be automatically released to the extent such guarantor is released in connection with a sale or other disposition of the equity interests of such guarantor in a transaction not prohibited by the indenture that will govern the notes. The indenture also will permit us to designate one or more of the Issuer's restricted subsidiaries that is a guarantor of the notes as an unrestricted subsidiary, which will result in the guarantee of such guarantor being automatically released. If a guarantor is released from its guarantee of the Senior Secured Credit Facilities and certain other indebtedness of the Issuer or any other guarantor, other than in connection with a refinancing of the Senior Secured Credit Facilities and such other indebtedness or a payment under such guarantee, or a guarantor ceases to be a subsidiary as a result of any foreclosure of any pledge or security interest securing the secured indebtedness, such subsidiary's guarantee of the notes will be automatically released as well, in which case any liens on the assets of such subsidiary in favor of the Senior Secured Credit Facilities and the notes offered hereby will also be released. If the guarantee of any guarantor is released, no holder of the notes will have a claim as a creditor against that subsidiary, and the indebtedness and other liabilities, including trade payables and preferred stock, if any, whether secured or unsecured, of that subsidiary will be structurally senior to the claim of any holders of the notes. For a description of all circumstances in which a guarantor's subsidiary guarantee will be automatically released, see "Description of Notes—Guarantees."

There are circumstances, other than the repayment or discharge of the notes, under which the Collateral and the related guarantees will be released automatically, without your consent or the consent of the collateral agent for the notes, and you may not realize any payment upon the release of such Collateral.

Under various circumstances, the Collateral and related guarantees will be released automatically, including, but not limited to:

- upon a sale, transfer or other disposition of such Collateral (to a person that is not the Issuer or a guarantor) in a transaction not prohibited under the indenture that will govern the notes. See "Description of Notes—Release of Collateral";

- with respect to Collateral held by a guarantor of the notes, upon the release of such guarantor from its guarantees; and

- if the Issuer or the notes are rated investment grade by any two of the three rating agencies. See "Description of Notes—Covenant Suspension."

The indenture that will govern the notes will also permit us to designate one or more of the Issuer's restricted subsidiaries that is a guarantor of the notes as an unrestricted subsidiary. If the Issuer designates a subsidiary guarantor as an unrestricted subsidiary for purposes of the indenture that will govern the notes, all of the liens on any Collateral owned by that subsidiary or any of its subsidiaries and any guarantees of the notes by that subsidiary or any of its subsidiaries will be released under the indenture that will govern the notes. Designation of an unrestricted subsidiary will reduce the aggregate value of the Collateral securing the notes to the extent that liens on the assets of the unrestricted subsidiary and its subsidiaries are released. In addition, the creditors of any such unrestricted subsidiary and its subsidiaries will have a claim on the assets of the unrestricted subsidiary and its subsidiaries senior to the claim of the holders of the notes.

If the Liens securing the First Lien Notes Obligations are released as a result of the Covenant Suspension Event, as defined under the heading "Description of Notes," the notes will remain unsecured and no Liens will be granted unless a Reversion Date occurs.

If the Liens securing the First Lien Notes Obligations, as defined under the heading "Description of Notes," are released as a result of the Covenant Suspension Event, the notes will remain unsecured and no Liens will be granted unless a Reversion Date occurs. Any pledge of collateral in favor of the collateral agent for the notes and the other security documents delivered after the Reversion Date, could be avoidable in bankruptcy and if this were to occur, you could lose the benefit of such security interest. See "Any future pledge of Collateral or issuance of a guarantee might be avoidable by a trustee in bankruptcy."

The lenders under the Senior Secured Credit Facilities have the discretion to release any guarantors under the Senior Secured Credit Facilities in a variety of circumstances, which could cause those guarantors to be released from their guarantees of the notes, in which case any liens on the assets of such guarantor in favor of the Senior Secured Credit Facilities and the notes offered hereby will also be released.

While any obligations under the Senior Secured Credit Facilities remain outstanding, any guarantee of the notes may be released without action by, or consent of, any holder of the notes, if the related guarantor is no longer a guarantor of obligations under the Senior Secured Credit Facilities or certain other indebtedness of the Issuer or any other guarantor, in which case any liens on the assets of such guarantor in favor of the Senior Secured Credit Facilities and the notes offered hereby will also be released. See "Description of Notes—Guarantees." The lenders under the Senior Secured Credit Facilities will have the discretion to release the guarantees under the Senior Secured Credit Facilities in a variety of circumstances. You will not have a claim as a creditor against any entity that is no longer a guarantor of the notes, and the indebtedness and other liabilities, including trade payables, whether secured or unsecured, of those non-guarantor subsidiaries will effectively be senior to claims of noteholders.

The credit agreement that governs the Senior Secured Credit Facilities and the indenture that governs the Existing Unsecured Notes restricts, and the indenture that will govern the notes will restrict, the Issuer's current and future operations, particularly the Issuer's ability to respond to changes or to take certain actions, and as a result, may adversely affect the Issuer's business, financial condition and results of operations.

The credit agreement that governs the Senior Secured Credit Facilities and the indenture that governs the Existing Unsecured Notes contains, and the indenture that will govern the notes will contain, a number of covenants that, among other things, may adversely affect the Issuer's ability to finance its future operations or capital needs or engage in other business activities that may be in the Issuer's interest. The agreements governing the Issuer's indebtedness restrict or will restrict, subject to certain exceptions, the Issuer's ability and the ability of the Issuer's restricted subsidiaries to, among other things:

- incur additional indebtedness and guarantee indebtedness;
- pay dividends or make other distributions in respect of, or repurchase or redeem, capital stock;
- prepay, redeem or repurchase certain debt;
- make loans and investments;
- sell or otherwise dispose of assets;
- sell stock of the Issuer's subsidiaries;
- create or incur liens;
- enter into certain transactions with affiliates;
- enter into agreements restricting the Issuer's and the Issuer's subsidiaries' ability to pay dividends or to incur liens on assets;

- enter into amendments to certain subordinated indebtedness in a manner materially adverse to the lenders; and

- consolidate, merge or sell all or substantially all of the Issuer's assets.

In addition, any future financing arrangements entered into by us may contain similar restrictions. As a result of these covenants and restrictions, the Issuer is and will be limited in how the Issuer conducts its business, and the Issuer may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. In addition, the Issuer will be required to maintain specified financial ratios and satisfy other financial condition tests. The terms of any future indebtedness the Issuer may incur could include more restrictive covenants. The Issuer cannot assure you that it will be able to maintain compliance with these covenants in the future and, if the Issuer fails to do so, that the Issuer will be able to obtain waivers from the lenders and/or amend the covenants. Events beyond our control, including the impact of COVID-19, may affect our ability to comply with our covenants.

The Issuer's failure to comply with the restrictive covenants described above as well as others contained in the Issuer's future debt instruments from time to time could result in an event of default, which, if not cured or waived, could result in the Issuer being required to repay these borrowings before their maturity. If the Issuer is forced to refinance these borrowings on less favorable terms or cannot refinance these borrowings, the Issuer's results of operations and financial condition could be adversely affected.

Federal and state statutes may allow courts, under specific circumstances, to avoid the notes, the guarantees relating to the notes, and the liens securing the notes and related guarantees, subordinate claims in respect of the notes, the guarantees and the liens securing the notes and related guarantees and/or require holders of the notes to return payments received from us in respect of the guarantees and the liens.

The incurrence of indebtedness evidenced by the notes, the guarantees and the grant of liens by the guarantors (including any future guarantees and future liens) may be subject to review and challenge under relevant state and federal fraudulent conveyance or fraudulent transfer statutes in a bankruptcy or reorganization case or a lawsuit by or on behalf of the Issuer's creditors outside of bankruptcy. Under these statutes, the notes, the guarantees and the grant of liens, could be avoided, or claims in respect of the notes, the guarantees and the liens could be subordinated to all of the Issuer's other indebtedness, if a court were to find at the time the Issuer or such guarantor issued the notes, incurred a guarantee of the notes or granted the lien, as applicable, that the Issuer or the applicable guarantor received less than reasonably equivalent value or fair consideration for issuing the note, incurring the guarantee or granting the lien, and:

- intended to hinder, delay or defraud any present or future creditor;

- was insolvent or rendered insolvent by reason of the incurrence of such indebtedness;

- was engaged in, or about to engage in, a business or transaction for which the Issuer's or the guarantor's remaining assets constituted unreasonably small capital; or

- intended to incur, or believed that the Issuer or guarantor would incur, indebtedness beyond the Issuer's or such guarantor's ability to repay such debts as they mature.

A court might also avoid the issuance of the notes, a guarantee or a lien, without regard to the above factors, if the court found that the Issuer issued the notes or the guarantors entered into the applicable guarantee or granted the liens with actual intent to hinder, delay or defraud the Issuer's or the guarantors' respective creditors.

If a court were to avoid (x) the issuance of the notes or the guarantees, you would no longer have a claim against us or the guarantors or (y) in the case of the liens granted to secure the notes, you would no longer have a secured claim against us or the guarantors, as applicable. Sufficient funds to repay the notes may not be available from other sources, including the remaining guarantors, if any. If a note, guarantee or a lien is avoided as a fraudulent conveyance or fraudulent transfer or found to be unenforceable for any reason, you will not have a claim against that

obligor and will only be a creditor of the Issuer or any guarantor to the extent the Issuer's or such guarantor's obligation is not set aside or found to be unenforceable. You may also be required to return payments you have received, as the court might direct you to repay any amounts that you already received from us or the guarantors with respect to such note, guarantees and liens.

In addition, any payment by us pursuant to the notes or by a guarantor made at a time when the Issuer or such guarantor is subsequently found to be insolvent could be avoided and required to be returned to us or such guarantor or to a fund for the benefit of the Issuer's or the guarantor's creditors if such payment is made to an insider within a one-year period prior to a bankruptcy filing or within 90 days to any non-insider party and such payment would give the holders of notes more than such holders of notes would have received in a liquidation under Title 11 of the United States Code, as amended, or the "Bankruptcy Code."

As a general matter, value is given for a transfer or an obligation if, in exchange for the transfer or obligation, property is transferred or a valid antecedent debt is satisfied. A court would likely find that a guarantor did not receive reasonably equivalent value or fair consideration for such guarantee and/or lien if such guarantor did not substantially benefit directly or indirectly from the issuance of the notes and/or such guarantee and/or lien. Thus, if the guarantees were legally challenged, any guarantee could be subject to the claim that, since the guarantee was incurred for the Issuer's benefit, and only indirectly for the benefit of the guarantor, the obligations of the applicable guarantor were incurred for less than reasonably equivalent value or fair consideration.

The measures of insolvency for purposes of these fraudulent conveyance or transfer and preferences laws will vary depending upon the law applied in any proceeding. Generally, however, the Issuer would be considered insolvent if:

- the sum of the Issuer's indebtedness, including contingent liabilities, was greater than the fair value of all the Issuer's assets;

- the present fair saleable value of the Issuer's assets were less than the amount that would be required to pay the Issuer's probable liability on existing indebtedness, including contingent liabilities, as they become absolute and mature; or

- the Issuer could not pay the Issuer's debts as they become due.

The Issuer cannot assure you as to the standard a court would apply in making such determinations or that a court would agree with the Issuer's conclusions in this regard that the Issuer and the guarantors will not be insolvent or rendered insolvent by the issuance of the notes and the guarantees. Regardless of the actual standard applied by the court, we cannot be certain that the issuance of the notes, a guarantee, or the granting of liens would not be avoided as a preference, fraudulent transfer, fraudulent conveyance, or otherwise, or that the issuance of the notes and the guarantees would not be subordinated to the Issuer's or any guarantor's other debt. The indentures that will govern the notes offered hereby will contain a "savings clause," which limits the liability of each guarantor on its guarantee to the maximum amount that such guarantor can incur without risk that its guarantee will be subject to avoidance as a fraudulent conveyance or fraudulent transfer. The Issuer cannot assure you such a savings clause limitation, as a legal matter will protect such guarantees from fraudulent conveyance or transfer challenges or, if it does, that the remaining amount due and collectible under the guarantees would suffice, if necessary, to pay the notes in full.

Finally, as a court of equity, the bankruptcy court may subordinate the claims in respect of the notes to other claims against us under the principle of "equitable subordination", if the court determines that: (1) the holders of the notes engaged in some type of inequitable conduct; (2) such inequitable conduct resulted in injury to the Issuer's other creditors or conferred an unfair advantage upon the holder of the notes; and (3) equitable subordination is not inconsistent with the provisions of the Bankruptcy Code.

The Issuer may not be able to repurchase the notes upon a Change of Control required by the indenture that will govern the notes.

Upon a Change of Control, as defined under the indenture that will govern the notes, you will have the right to require the Issuer to offer to purchase the notes then outstanding at a price equal to 101% of the principal amount

of such notes, plus accrued interest. In order to obtain sufficient funds to pay the purchase price of the outstanding notes, the Issuer may need to refinance the notes and/or the Senior Secured Credit Facilities.

However, it is possible that the Issuer will not have sufficient funds at the time of the change of control to make the required repurchase of the notes. If the Issuer is required to repurchase the notes, the Issuer could require third-party financing. The Issuer cannot be sure that it would be able to obtain third-party financing on acceptable terms, or at all. The Issuer's failure to offer to purchase all outstanding notes or to purchase all validly tendered notes would be an event of default under the indenture that will govern the notes. Such an event of default may cause the acceleration of the Issuer's other debt, including debt under the Senior Secured Credit Facilities. The Issuer's future debt also may contain restrictions on repayment requirements with respect to specified events or transactions that constitute a change of control under the indenture that will govern the notes.

The indenture governing the Existing Unsecured Notes also contains similar change of control offer provisions. The credit agreement governing our Senior Secured Credit Facilities also provide that a change of control is an event of default that permits lenders to accelerate the maturity of borrowings thereunder. Any of our future debt arrangements may contain similar provisions. If the Issuer is required to repurchase the notes pursuant to a change of control offer and repay certain amounts outstanding under such other indebtedness, the Issuer would probably require third-party financing. The Issuer cannot be sure that it would be able to obtain third-party financing on acceptable terms, or at all. If the indebtedness under the Senior Secured Credit Facilities is not paid, the lenders thereunder may seek to enforce security interests in the collateral, thereby limiting the Issuer's ability to raise cash to purchase the notes, and reducing the practical benefit of the offer to purchase provisions to the holders of the notes.

Holders of notes may not be able to determine when a change of control giving rise to their right to have the notes purchased has occurred following a sale of "substantially all" of the Issuer's assets.

One of the circumstances under which a change of control may occur is upon the sale or disposition of all or substantially all of the Issuer's assets. However, the phrase "all or substantially all" will likely be interpreted under applicable state law and will be dependent upon particular facts and circumstances. As a result, there may be a degree of uncertainty in ascertaining whether a sale or disposition of "all or substantially all" of the Issuer's capital stock or assets has occurred, in which case, the ability of a holder of the notes to obtain the benefit of an offer to repurchase all of a portion of the notes held by such holder may be impaired. See "Description of Notes—Repurchase at the Option of Holders."

The Issuer can enter into transactions like recapitalizations, reorganizations and other highly leveraged transactions that do not constitute a change of control but that could adversely affect the holders of the notes.

Certain important corporate events, such as leveraged recapitalizations, may not, under the indenture that will govern the notes, constitute a "change of control" that would require the Issuer to offer to purchase the notes, notwithstanding the fact that such corporate events could increase the level of the Issuer's indebtedness or otherwise adversely affect the Issuer's capital structure, credit ratings or the value of the notes. Therefore, the Issuer could, in the future, enter into certain transactions, including acquisitions, reorganizations, refinancings or other recapitalizations, which would not constitute a change of control under the indenture that will govern the notes, but that could increase the amount of indebtedness outstanding at such time or otherwise affect the Issuer's capital structure or credit ratings.

Holders of the notes will not be entitled to registration rights, and the Issuer does not currently intend to register the notes under applicable securities laws. There are restrictions on your ability to transfer and resell the notes without registration under applicable securities laws.

The notes are being offered and sold pursuant to an exemption from registration under the Securities Act and applicable state securities laws, and the Issuer does not currently intend to register the notes. The holders of the notes will not be entitled to require the Issuer to register the notes for resale or otherwise. Therefore, you may transfer or resell the notes in the United States only in a transaction registered under or exempt from the registration requirements of the Securities Act and applicable state securities laws. As a result, you may be required to bear the risk of your investment for an indefinite period of time. See "Transfer Restrictions."

The indenture that will govern the notes will not be qualified under the Trust Indenture Act and the Issuer will not be required to comply with the provisions of the Trust Indenture Act

The indenture that will govern the notes will not be qualified under the Trust Indenture Act and the Issuer will not be required to comply with the provisions of the Trust Indenture Act. Therefore, holders of the notes will not be entitled to the benefit of the provisions and protection of the Trust Indenture Act except to the extent there are similar provisions in the indenture that will govern the notes.

Your ability to transfer the notes may be limited by the absence of an active trading market, and an active trading market may not develop for the notes.

The notes will be a new issue of securities for which there is no established trading market. The Issuer expects the notes to be eligible for trading by "qualified institutional buyers," as defined under and pursuant to Rule 144A of the Securities Act or pursuant to Regulation S. The Issuer intends to apply to list the notes on the Official List of the Exchange. This listing application for the notes will be subject to approval by the Authority. There are no assurances that the notes will be listed and admitted to trade on the Official List of the Exchange. The initial purchasers have advised the Issuer that they intend to make a market in the notes, as permitted by applicable laws and regulations; however, the initial purchasers are not obligated to make a market in the notes and, if commenced, they may discontinue their market-making activities at any time without notice. Therefore, an active market for the notes may not develop or be maintained, which would adversely affect the market price and liquidity of the notes. In such case, the holders of the notes may not be able to sell their notes at a particular time or at a favorable price. If a trading market were to develop, future trading prices of the notes may be volatile and will depend on many factors, some of which are beyond the Issuer's control, including:

- the number of holders of notes;
- the Issuer's operating performance and financial condition;
- the market for similar securities;
- the interest of securities dealers in making a market for the notes;
- prevailing interest rates; and
- the aggregate principal amount of notes outstanding.

Even if an active trading market for the notes does develop, there is no guarantee that it will continue. Historically, the market for non-investment grade indebtedness has been subject to disruptions that have caused substantial volatility in the prices of securities similar to the notes. The market, if any, for the notes may experience similar disruptions and any such disruptions may adversely affect the liquidity in that market or the prices at which you may sell your notes. In addition, subsequent to their initial issuance, the notes may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar notes, the Issuer's performance and other factors.

The notes may not become, or remain, listed on the Official List of the Exchange, and the Issuer is under no obligation to maintain the listing of the notes in certain circumstances.

Although the Issuer will seek to have the notes listed on the Official List of the Exchange within a reasonable period after the issue date of such notes, the Issuer cannot assure you that the notes will become or remain listed on the Official List of the Exchange. The Issuer is under no obligation to maintain the listing of the notes on the Official List of Exchange and may cause the notes to be de-listed in circumstances where, among others, the continued listing would require preparation of financial statements in accordance with standards other than those accounting principles generally accepted in the United States or we determine that maintenance of such listing otherwise becomes burdensome. In such cases, the Issuer will be obliged to use commercially reasonably efforts to seek an alternative listing for the notes on another stock exchange. However, if, among others, such an alternative listing is

not available to us or is, in our opinion, unduly burdensome, an alternative listing for the notes may not be obtained. See "Description of Notes—Maintenance of Listing." The Issuer may cease to make or maintain such listing on the Official List of the Exchange and may seek to obtain and maintain the listing of the notes on another stock exchange, although there can be no assurance that we will be able to do so. Although no assurance is made as to the liquidity of the notes as a result of listing on the Official List of the Exchange or another recognized listing exchange for comparable issuers in accordance with the indenture related to the notes, failure to be approved for listing or the delisting of notes from the Official List of the Exchange or another listing exchange in accordance with the indenture that will govern the notes may have a material adverse effect on a holder's ability to sell the notes. Consummation of the offering of the notes is not contingent on the Issuer making an application or obtaining such listing or admission to trading.

There are restrictions on your ability to transfer or resell the notes.

The notes are being offered and sold pursuant to an exemption from registration under the Securities Act and applicable state securities laws. Therefore, you may transfer or resell the notes in the United States only in a transaction registered under or exempt from the registration requirements of the Securities Act and applicable state securities laws, and you may be required to bear the risk of your investment for an indefinite period of time. The Issuer is not obligated to register the notes under the Securities Act or to offer to exchange the notes in an exchange offer registered under the Securities Act. As a result, for so long as the notes remain outstanding, they may be transferred or resold only in transactions exempt from the registration requirements of federal and applicable state securities laws.

A downgrade, suspension or withdrawal of the rating assigned by a rating agency to the notes, if any, could cause the liquidity or market value of the notes to decline.

The notes have been rated by rating agencies. A rating is not a recommendation to purchase, sell or hold the notes. The Issuer cannot assure you that any rating assigned will remain for any given period of time or that a rating will not be lowered or withdrawn entirely by a rating agency if, in that rating agency's judgment, circumstances relating to the basis of the rating, such as adverse changes in the Issuer's business, so warrant. Any lowering or withdrawal of a rating by a rating agency could reduce the liquidity or market value of the notes.

Many of the covenants in the indenture that will govern the notes will be suspended if the notes are rated investment grade by two of the three rating agencies.

Many of the covenants in the indenture that will govern the notes will no longer apply to us during any time that the notes are rated investment grade by two of the three rating agencies, provided that at such time no default under the relevant indenture has occurred and is continuing. These covenants restrict, among other things, the Issuer's ability to pay distributions, incur debt and enter into certain other transactions. There can be no assurance that the notes will ever be rated investment grade, or that if they are rated investment grade, that the notes will maintain these ratings. However, suspension of these covenants would allow us to engage in certain transactions that would not be permitted while these covenants were in force and any action taken while these covenants are suspended will not result in an event of default under the indenture on the basis that such actions would have been prohibited by these covenants. See "Description of Notes—Certain Covenants—Covenant Suspension."

Sales of assets by the Issuer and the guarantors could reduce the Collateral and the related guarantees.

The security documents that will relate to the notes offered hereby will allow the Issuer and the guarantors to remain in possession of, retain exclusive control over, freely operate and collect, invest and dispose of any income from, the Collateral. To the extent the Issuer sells any assets that constitute such Collateral, the proceeds from such sale will be subject to the liens securing the notes offered hereby and the related guarantees only to the extent such proceeds would otherwise constitute Collateral securing the notes offered hereby and the related guarantees under the security documents. Such proceeds will also be subject to the security interests of certain creditors other than the holders of the notes offered hereby, some of which may be senior or prior to the liens held by the holders of the notes, or may have a lien in those assets that is pari passu with the lien of the holders of the notes (including, without limitation, the Senior Secured Credit Facilities). To the extent the proceeds from any sale of Collateral do not

constitute Collateral under the security documents, the pool of assets securing the notes and the related guarantees will be reduced, and the notes and the related guarantees will not be secured by such proceeds.

The value of the Collateral securing the notes offered hereby and the related guarantees may not be sufficient to satisfy the Issuer's obligations under the notes.

Obligations under the notes will be secured, together with the Senior Secured Credit Facilities, by substantially all of the assets of the Issuer and any existing and future guarantors, including all of the issued and outstanding equity interests of the Issuer and each wholly-owned restricted subsidiary directly owned by the Issuer or any guarantor (which, in the case of the voting equity interests of a foreign subsidiary that is a CFC or of a FSHCO (each as defined under the heading "Description of Notes"), will be limited to 65% of the issued and outstanding voting equity interests of such subsidiary). No appraisal of the value of the Collateral has been made in connection with this offering of the notes, and the fair market value of the Collateral will be subject to fluctuations based on factors that include, among others, changing economic conditions, competition and other future trends. By its nature, some or all of the Collateral may be illiquid and may have no readily ascertainable market value. In the event of a foreclosure, liquidation, bankruptcy or similar proceeding, the lenders under the Senior Secured Credit Facilities and the holders of the notes will be entitled to be repaid in full from the proceeds of the Collateral before any payment is made in respect of any other indebtedness secured by a junior lien on such Collateral or unsecured (including, without limitation, the Existing Unsecured Notes). Moreover, the lenders under the Senior Secured Credit Facilities and the holders of any other additional indebtedness secured by a first-priority lien on the Collateral will share the proceeds of such Collateral ratably with the holders of the notes, thereby diluting the Collateral coverage available to holders of the notes. In particular, the fair market value of the Collateral may not be sufficient to repay the holders of the notes upon any foreclosure, liquidation, bankruptcy or similar proceeding and after the repayment of indebtedness with prior security interests in the Collateral, if any. There also can be no assurance that the Collateral will be saleable, and even if saleable, the timing of its liquidation would be uncertain. Accordingly, there may not be sufficient Collateral to pay all or any of the amounts due on the notes. Any claim for the difference between the amount, if any, realized by holders of the notes from the sale of the Collateral securing the notes and the obligations under the notes will rank equally in right of payment with all of the Issuer's other unsecured unsubordinated indebtedness (including, without limitation, the Existing Unsecured Notes) and other obligations, including trade payables. In addition, as discussed further below, the holders of the notes would not be entitled to receive post-petition interest or applicable fees, costs, expenses, or charges to the extent the amount of the obligations due under the notes exceeded the value of the Collateral (after taking into account all other first-priority debt that was also secured by the Collateral), or any "adequate protection" on account of any undersecured portion of the notes. See "—In the event of a bankruptcy of the Issuer or any of the guarantors, holders of the notes may be deemed to have an unsecured claim to the extent that the Issuer's obligations in respect of the notes exceed the fair market value of the Collateral securing the notes and the related guarantees."

With respect to some of the Collateral, the security interest of the Notes Collateral Agent for the notes and its ability to foreclose will also be limited by the need to meet certain requirements, such as obtaining third-party consents and making additional filings. If the Issuer is unable to obtain these consents or make these filings, the security interests may be invalid and the holders will not be entitled to the Collateral or any recovery with respect thereto. We cannot assure you that any such required consents will be obtained on a timely basis or at all. These requirements may limit the number of potential bidders for certain Collateral in any foreclosure or other auction and may delay any sale, either of which events may have an adverse effect on the sale price of the Collateral. Therefore, the practical value of realizing on the Collateral may, without the appropriate consents and filings, be limited.

Under the terms of the indenture that will govern the notes, the Issuer will be permitted to incur indebtedness in amounts in excess of the current commitments under Senior Secured Credit Facilities. All of the commitments under the Senior Secured Credit Facilities are secured by the Collateral on a first-priority lien basis and will be entitled to payment out of the proceeds of any sale of the Collateral on a pari passu basis with the holders of the notes. The indenture that will govern the notes will also permit the Issuer and the guarantors to create additional liens on the Collateral under specified circumstances, some of which liens may be pari passu with or senior to the liens securing the notes. Any obligations secured by such liens may further dilute the collateral coverage and limit the recovery from the realization of the collateral available to satisfy holders of the notes. See "Description of Notes—Certain Covenants—Liens."

Even though the holders of the notes will benefit from a first-priority lien on the Collateral, the collateral agent under the Senior Secured Credit Facilities will initially control actions with respect to that Collateral.

The rights of the holders of the notes with respect to the Collateral that will secure the notes on a first-priority basis will be subject to a first lien intercreditor agreement among all holders of obligations secured by that Collateral on a first-priority basis, including the obligations under the Senior Secured Credit Facilities. Under that first lien intercreditor agreement, any actions that may be taken with respect to such Collateral, including the ability to cause the commencement of enforcement proceedings against such Collateral and to control such proceedings, will be at the exclusive direction of the collateral agent under the Senior Secured Credit Facilities until the earlier of (1) the date on which the Issuer's obligations under the Senior Secured Credit Facilities are discharged (which discharge does not include certain refinancings of the senior secured credit facilities) or (2) 90 days after the occurrence of an event of default under the indenture that will govern the notes and acceleration of the obligations thereunder, if the notes represent the largest outstanding principal amount of indebtedness secured by a first-priority lien on the Collateral (including the Senior Secured Credit Facilities) and the collateral agent for the notes has complied with the applicable notice provisions so long as the agent under the Senior Secured Credit Facilities has not commenced the exercise of remedies with respect to Collateral or the Issuer or any guarantor is not then a debtor in any bankruptcy or similar insolvency or liquidation proceeding.

After the discharge of the obligations with respect to the Senior Secured Credit Facilities, the right to direct the actions with respect to the Collateral securing the notes will pass to the authorized representative of holders of the then largest outstanding principal amount of indebtedness secured by a first lien on the Collateral. If the Issuer issues additional indebtedness that is equal in priority to the lien securing the Issuer's notes in the future in a greater principal amount than the notes, then the authorized representative for such additional indebtedness would be next in line to exercise rights under the first lien intercreditor agreement, rather than the trustee as the collateral agent for the notes. Accordingly, the trustee under the indenture that will govern the notes may never have the right to control remedies and take other actions with respect to the Collateral.

In addition, under the terms of the first lien intercreditor agreement, if at any time the controlling collateral agent forecloses upon or otherwise exercises remedies against any Collateral resulting in a sale thereof, the lien securing the notes on such Collateral will be automatically released and discharged (provided that any proceeds from such sale are applied ratably among all the then outstanding first-priority obligations). The Collateral so released will no longer secure the Issuer's and the guarantors' obligations under the notes and the related guarantees. The first lien intercreditor agreement will also prohibit the trustee and the collateral agent for the notes from objecting following the filing of a bankruptcy petition to a proposed debtor-in-possession financing to be provided to us that is secured by the Collateral or to the use of cash collateral that has not been opposed to or objected to by the controlling collateral agent or the other controlling secured parties, subject to certain conditions and limited exceptions. After such a filing, the value of the Collateral could materially deteriorate, and holders of the notes would be unable to raise an objection.

Also, under the first lien intercreditor agreement, in the event that the holders of the notes obtain possession of any Collateral or realize any proceeds or payment in respect of any such Collateral at any time prior to the discharge of each of the other first-priority obligations, then such holders will be obligated to hold such collateral, proceeds, or payment in trust for the other holders of first-priority obligations and, subject to the first lien intercreditor agreement, promptly transfer such collateral, proceeds, or payment, as the case may be, to the controlling collateral agent, to be distributed in accordance with the provisions of the first lien intercreditor agreement among all the holders of first-priority obligations. Thus, there can be no assurances that under the first lien intercreditor agreement, the holders of the notes would not be obligated to turn over to the other holders of the first-priority obligations any Collateral, proceeds or payments they may receive.

Finally, holders of the notes will waive certain important rights otherwise available to secured creditors in a bankruptcy, including the right to object to certain debtor-in-possession financings.

Pledges of equity interests of certain of the Issuer's foreign subsidiaries may not constitute Collateral for the repayment of the notes because such pledges may not be perfected pursuant to foreign law pledge documents.

Part of the security for the repayment of the notes may consist of a pledge of up to 65% of the voting equity interests and 100% of the non-voting equity interests of foreign subsidiaries directly owned by the Issuer or the Issuer's domestic subsidiaries. Although such pledges of capital stock will be required to be granted under U.S. security documents, it may be necessary or desirable to perfect such pledges under foreign law pledge documents. The Issuer will not be required to provide such foreign law pledge documents. Unless and until such pledges of equity interests are properly perfected, they may not constitute Collateral for the repayment of the notes.

Certain laws and regulations may impose restrictions or limitations on foreclosure.

The Issuer's obligations under the notes and the guarantors' obligations under the guarantees are secured only by the Collateral described in this offering circular. The collateral agent's ability to foreclose on the Collateral on behalf of the holders of the notes may be subject to perfection, priority issues, state law requirements, applicable bankruptcy law, and practical problems associated with the realization of the collateral agent's security interest or lien in the Collateral, including cure rights, foreclosing on the Collateral within the time periods permitted by third parties or prescribed by laws, obtaining third-party consents, making additional filings, statutory rights of redemption and the effect of the order of foreclosure. The Issuer cannot assure you that the consents of any third parties and approvals by governmental entities or courts of competent jurisdiction will be given when required to facilitate a foreclosure on such assets. Therefore, the Issuer cannot assure you that foreclosure on the Collateral will be sufficient to make all payments on the notes.

Rights of holders of the notes in the Collateral may be adversely affected by bankruptcy proceedings.

The right of the collateral agent for the notes to foreclose upon, repossess and dispose of the Collateral securing the notes and the related guarantees upon acceleration of the payment thereof is likely to be significantly impaired by federal bankruptcy law if bankruptcy proceedings are commenced by or against the Issuer or the Issuer's domestic restricted subsidiaries that provide security for the notes or guarantees prior to, or possibly even after, any collateral agent has repossessed and disposed of the Collateral. Under the U.S. Bankruptcy Code, a secured creditor, such as the collateral agent for the notes, is prohibited from foreclosing upon or repossessing its security from a debtor in a bankruptcy case, or from disposing of security repossessed from a debtor, without prior bankruptcy court approval (which may not be given under the circumstances). Moreover, bankruptcy law permits the debtor to continue to retain and use Collateral, and the proceeds, products, rents or profits of the Collateral, even though the debtor is in default under the applicable debt instruments, provided that the secured creditor is given "adequate protection." The meaning of the term "adequate protection" may vary according to the circumstances, but it is intended in general to protect the value of the secured creditor's interest in the Collateral and may include cash payments or the granting of additional or replacement security, if and at such time as the court in its discretion determines, for any diminution in the value of the Collateral as a result of the stay of repossession or disposition or any use of the Collateral by the debtor during the pendency of the bankruptcy case. A bankruptcy court may determine that a secured creditor may not require compensation for a diminution in the value of its Collateral if the value of the Collateral exceeds the debt it secures. In view of both the lack of a precise definition of the term "adequate protection" under the U.S. Bankruptcy Code and the broad discretionary powers of a bankruptcy court, it is impossible to predict how, whether or when payments under the notes could be made following the commencement of a bankruptcy case, the length of the delay in making any such payments or whether any such payment will be made at all or in what form, whether or when the collateral agent could or would repossess or dispose of the Collateral, or whether or to what extent or in what form holders of the notes would be compensated for any delay in payment or loss of the value of the Collateral through the requirements of "adequate protection."

Furthermore, any disposition of the Collateral during a bankruptcy case outside of the ordinary course of business would also require approval from the bankruptcy court (which may not be given under the circumstances).

Also, in the event the bankruptcy court determines that the value of the Collateral is not sufficient to repay all amounts due on the notes and all of our other outstanding First Lien Obligations, as defined under the heading "Description of Notes," the holders of the notes would be "undersecured." U.S. bankruptcy laws do not provide for the payment or accrual of interest, costs and attorneys' fees on the "undersecured" portion of a creditor claims during a debtor's bankruptcy case nor is a creditor entitled to adequate protection on account of any undersecured portion of its claims.

In addition, as noted above, the first lien intercreditor agreement will prohibit the trustee and the collateral agent for the notes from objecting following the filing of a bankruptcy petition to a proposed debtor-in-possession financing to be provided to us that is secured by the Collateral or to the use of cash collateral that has not been opposed to or objected to by the controlling collateral agent or the other controlling secured parties, subject to certain conditions and limited exceptions. After such a filing, the value of the Collateral could materially deteriorate, and holders of the notes would be unable to raise an objection.

In the event of a bankruptcy of the Issuer or any of the guarantors, holders of the notes may be deemed to have an unsecured claim to the extent that the Issuer's obligations in respect of the notes exceed the fair market value of the Collateral securing the notes and the related guarantees.

In any bankruptcy proceeding with respect to the Issuer or any of the guarantors, it is possible that the bankruptcy trustee, the debtor-in-possession or competing creditors will assert that the fair market value of the Collateral with respect to the notes on the date of the bankruptcy filing was less than the then-current principal amount of the notes and all of our other outstanding First Lien Obligations. Upon a finding by the bankruptcy court that the notes are under-collateralized, the claims in the bankruptcy proceeding with respect to the notes would be bifurcated between a secured claim and an unsecured claim, and the unsecured claim would not be entitled to the benefits of security in the Collateral. In such event, the secured claims of the holders of the notes would be limited to the value of the Collateral.

The consequences of a finding of under-collateralization would include, among other things, a lack of entitlement on the part of the holders of the notes to receive post-petition interest, fees, and expenses and a lack of entitlement on the part of the unsecured portion of the notes to receive "adequate protection" under federal bankruptcy laws, as discussed above. In addition, if any payments of post-petition interest had been made at the time of such a finding of under-collateralization, those payments could be recharacterized by the bankruptcy court as a reduction of the principal amount of the secured claim with respect to the notes.

Rights of holders of the notes in the Collateral may be adversely affected by the failure to perfect the security interests.

The Collateral securing the notes and the related guarantees will include substantially all of the Issuer's and its subsidiary guarantors' tangible and intangible assets that secure the Issuer's indebtedness under the Senior Secured Credit Facilities, whether now owned or acquired or arising in the future. Applicable law requires that a security interest in certain tangible and intangible assets can only be properly perfected and its priority retained through certain actions undertaken by the secured party. The liens on the Collateral securing the notes may not be perfected if the Issuer is not able to take the actions necessary to perfect any of these liens on or prior to the date of the issuance of the notes or thereafter. We will have limited obligations to perfect the security interest of the holders of the notes in specified collateral other than the filing of financing statements. To the extent a security interest in certain collateral is not perfected on the date of the issuance of the notes, such security interest might be avoidable in bankruptcy, which could impact the value of the Collateral. See "—Any future pledge of Collateral or issuance of a guarantee might be avoidable by a trustee in bankruptcy."

If additional material wholly-owned domestic restricted subsidiaries are formed or acquired and become guarantors under the indentures that will govern notes, additional financing statements would be required to be filed to perfect the security interest in the assets of such guarantors. Depending on the type of the assets constituting after-acquired collateral, additional action may be required to be taken by the Issuer for the notes or the collateral agent for the Senior Secured Credit Facilities, to perfect the security interest in such assets, such as the delivery of physical collateral, the execution of account control agreements or the execution and recordation of mortgages or deeds of trust. Applicable law requires that certain property and rights acquired after the grant of a general security interest can be perfected only at the time such property and rights are acquired and identified. Neither the trustee nor the collateral agent for the notes will be responsible to monitor, and there can be no assurance that the Issuer will inform the trustee or the collateral agent of, the future acquisition of property and rights that constitute Collateral, and that the necessary action will be taken to properly perfect the security interest in such after-acquired collateral. The collateral agent for the notes and the collateral agent for the Senior Secured Credit Facilities will have no obligation to monitor the acquisition of additional property or rights that constitute Collateral or the perfection of any security interests therein. Such inaction may result in the loss of the security interest in such Collateral or the priority of the

security interest in favor of the notes and the guarantees against third parties. Even if the collateral agent does properly perfect liens on Collateral acquired or arising in the future, such liens may potentially be avoidable as a preference in any bankruptcy proceeding under certain circumstances. See "—Any future pledge of Collateral or issuance of a guarantee might be avoidable by a trustee in bankruptcy.

Any future pledge of Collateral or issuance of a guarantee might be avoidable by a trustee in bankruptcy.

Any future pledge of Collateral or guarantee in favor of the holders of the notes (including any Liens delivered or reinstated after the Reversion Date) or any future guarantee in favor of the holders of the notes might be avoidable by the pledgor (as debtor-in-possession), guarantor or by its trustee in bankruptcy (or potentially by our other creditors) as a preferential transfer or otherwise if certain events or circumstances exist or occur, including, among others, if the pledgor or guarantor is insolvent at the time of the pledge or guarantee, that pledge or issuance of that guarantee permits the holders of the notes to receive a greater recovery in a bankruptcy case of the pledgor under Chapter 7 of the U.S. Bankruptcy Code than if such pledge or guarantee had not been given, and a bankruptcy proceeding in respect of the pledgor or guarantor is commenced within 90 days following the pledge or the perfection thereof or the issuance of the guarantee (as applicable), or, in certain circumstances, a longer period. To the extent that the grant of any such security interest and/or guarantee is avoided as a preference or otherwise, you would lose the benefit of the security interest and/or guarantee (as applicable).

The Collateral is subject to casualty risks.

The Issuer intends to maintain insurance or otherwise insure against hazards in a manner appropriate and customary for the Issuer's business. There are, however, certain losses that may be either uninsurable or not economically insurable, in whole or in part. Insurance proceeds may not compensate the Issuer fully for its losses. If there is a complete or partial loss or impairment in value of any of the pledged collateral, the insurance proceeds may not be sufficient to satisfy all of the secured obligations, including the notes and the related guarantees.

The imposition of certain permitted liens will, under certain circumstances, permit the liens on the related assets securing the notes and the guarantee to be either subordinated to such permitted liens or released. There are also certain other assets that are also excluded from the Collateral.

The indentures that will govern the notes will permit liens in favor of third parties to secure additional debt and, in the case of certain of such liens, the liens on the related assets securing the notes and the guarantees may, under certain circumstances, be either subordinated to such permitted liens or released. Our ability to incur additional debt and liens on such additional debt in favor of third parties is subject to limitations as described herein under the heading "Description of Notes." In addition, certain assets are excluded from the Collateral securing the notes and the guarantees, as discussed under "Description of Notes—Security for the Notes." In connection with the A/R Facility, accounts receivables and related assets of VWR International, LLC and certain of its domestic wholly-owned subsidiaries will be transferred to VWR Receivables Funding, LLC (which is not a guarantor of the notes) and otherwise secure the A/R Facility. In connection with the amendment or the amendment and restatement of the A/R Facility, accounts receivables and related assets of certain Avantor entities will also be transferred to VWR Receivables Funding, LLC (which is not a guarantor of the notes) and otherwise become subject to and secure the A/R Facility. Accounts Receivables and related assets that secure the A/R Facility, are not permitted to be subject to any other liens. Accordingly, such receivables and related assets will not constitute Collateral securing the notes. If an event of default occurs and the maturity of the notes is accelerated, the notes and the related guarantees will rank pari passu with the holders of other unsecured or senior indebtedness of the relevant obligor with respect to such excluded assets. As a result, if the value of the assets pledged as security for the notes is less than the value of the claims of the holders of the notes, those claims may not be satisfied in full before the claims of the Issuer's unsecured creditors are paid.

Lien searches may not be completed until after the date of this offering circular.

Lien searches on the collateral may not be completed until after the date of this offering circular. These lien searches, once completed, could reveal a prior lien or multiple prior liens on the collateral and these prior liens may prevent or inhibit the Notes Collateral Agent from foreclosing on the liens that will secure the notes and may impair the value of the Collateral.

If a bankruptcy petition were filed by or against us in the United States, the allowed claim for the notes may be less than the principal amount of the notes stated in the indenture.

If a bankruptcy petition were filed by or against us under the U.S. Bankruptcy Code after the issuance of the notes, the claim by any holder of the notes for the principal amount thereof may be allowed in an amount equal to the sum of:

- the original issue price of the notes; and
- that portion of the stated principal amount of the notes that exceeds the issue price thereof, if any, that does not constitute "unmatured interest" for the purposes of the U.S. Bankruptcy Code.

Any such discount that was not amortized as of the date of the bankruptcy filing would constitute unmatured interest, which is not allowable as part of a bankruptcy claim under the U.S. Bankruptcy Code. Accordingly, holders of the notes under these circumstances may receive an amount that is less than the principal amount thereof stated in the indenture.

An investment in the notes by a purchaser whose home currency is not euro entails significant risks.

All payments of interest on and the principal of the notes and any redemption price for the notes will be made in euros. These risks include the risk that exchange rates may significantly change (including changes due to devaluation of the euro or revaluation of the holder's currency) and the risk that authorities with jurisdiction over the holder's currency may impose or modify exchange controls. An investment in the notes by a purchaser whose home currency is not euro entails significant risks.

These risks generally depend on factors over which we have no control, such as economic, financial and political events and the supply of and demand for the relevant currencies. In the past, rates of exchange between euro and certain currencies have been highly volatile, and each holder should be aware that volatility may occur in the future. Fluctuations in any particular exchange rate that have occurred in the past, however, are not necessarily indicative of fluctuations in the rate that may occur during the term of the notes. An appreciation in the value of the holder's currency relative to the euro would decrease the holder's currency-equivalent yield on the notes, the holder's currency-equivalent value of the principal payable on the notes and the holder's currency-equivalent market value of the notes, and, in certain circumstances, could result in a loss to the holder. See "Currency Presentation and Exchange Rate Data." Governments and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate. As a result, holders of the notes may receive less interest or principal than expected, or no interest or principal.

The terms of the notes provided for in the applicable indenture governing such notes will permit us to make payments in U.S. dollars if the Issuer is unable to obtain euros in certain circumstances, which could adversely affect the value of the notes.

The terms of the notes will permit us to make payments in U.S. dollars if the euro is unavailable to the Issuer due to the imposition of exchange controls or other circumstances beyond the Issuer's control or if the euro is no longer being used by the then member states of the European Monetary Union that have adopted the euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the notes and the related guarantees as required pursuant to the indenture that will govern the notes will be made in U.S. dollars until the euro is again available for the Issuer to be used. In such circumstances, the amount payable on any date in euro will be converted into U.S. dollars on the basis of the then most recently available market exchange rate for euros, as the case may be.

Any payment so made in respect of the notes and the related guarantees as required pursuant to the indenture that will govern the notes in U.S. dollars will not constitute an event of default under the indenture that will govern the notes. Neither the Trustee nor the paying agent thereunder will have any responsibility for effecting any such conversion.

There may be risks associated with foreign currency judgments in a lawsuit for payment on the notes, for which an investor may bear currency exchange risk.

The indenture that will govern the notes will be governed by the laws of the State of New York. Under New York law, a New York state court rendering a judgment on the notes would be required to render the judgment in euros.

However, in such a situation, the judgment would then be converted into U.S. dollars at the exchange rate prevailing on the date of entry of such judgment by the New York State court. Consequently, in a lawsuit for payment on the notes, investors of such notes would bear currency exchange risk until a New York state court judgment is entered, which could be a long time. In addition, a federal court in New York presiding over a dispute arising in connection with the notes may apply the foregoing New York law or in certain circumstances may render the judgment in U.S. dollars.

In courts outside of New York, investors of such notes may not be able to obtain a judgment in a currency other than U.S. dollars. For example, a judgment for money in an action based on the notes in many other U.S. federal or state courts ordinarily would be enforced in the United States only in U.S. dollars. The date used to determine the rate of conversion of euros into U.S. dollars would depend upon various factors, including which court renders the judgment and when the judgment is rendered.

You should consult your own financial and legal advisors as to the risks entailed by an investment in the notes. The notes are not an appropriate investment for investors who are unsophisticated with respect to foreign currency transactions.

The Issuer cannot assure you that the procedures for book-entry interests to be implemented through Euroclear or Clearstream will be adequate to ensure the timely exercise of your rights under the notes.

Unless and until notes in definitive registered form are issued in exchange for global notes, owners of book-entry interests will not be considered owners or holders of the notes except in the limited circumstances provided in the indenture governing such notes. The common depositary for Euroclear and Clearstream (or its nominee) will be the sole registered holder of the global notes representing the notes. After payment to the common depositary, the Issuer will have no responsibility or liability for the payment of interest, principal, or other amounts to the owners of book-entry interests. Accordingly, if you own a book-entry interest, you must rely on the procedures of Euroclear or Clearstream, as applicable, and if you are not a participant in Euroclear or Clearstream, on the procedures of the participant through which you own your interest, to exercise any rights and obligations of a holder under the Indenture governing such notes. See “Book-Entry; Delivery and Form.”

Unlike the holders of the notes themselves, owners of book-entry interests will not have the direct right to act upon our solicitations for consents, requests for waivers, or other actions from holders of the notes. Instead, if you own a book-entry interest, you will be permitted to act only to the extent you have received appropriate proxies to do so from Euroclear or Clearstream. There can be no assurance that procedures implemented for the granting of such proxies will be sufficient to enable you to vote on any request actions on a timely basis.

Similarly, upon the occurrence of an event of default under the indenture governing the notes, if you own a book-entry interest, you will be restricted to acting through Euroclear or Clearstream. We cannot assure you that the procedures to be implemented through Euroclear or Clearstream will be adequate to ensure the timely exercise of rights under the notes. See “Description of Notes—Book-Entry, Form, Denomination and Delivery of Notes.”

Holders of the notes may not be able to effect service of process or enforce judgments obtained against us outside of the United States.

We are organized under the laws of the United States. A substantial portion of our assets are located in the United States and, as a result, it may not be possible for investors to effect service of process or enforce judgments obtained against us outside the United States.

USE OF PROCEEDS

We estimate that the gross proceeds from this offering of the notes will be approximately $649.6 million equivalent, based on the daily foreign exchange rate as published by Bloomberg of $1.1810 to €1.00 as of October 26, 2020. We intend to use the net proceeds from this offering, along with the net proceeds from the New Term Loan Facility, borrowings under the A/R Facility and cash on hand, to redeem the Existing Secured Notes in full and to pay related fees and expenses.

The Dollar Secured Notes bear interest at a rate of 6.000% per annum and are scheduled to mature on October 1, 2024. The information contained in this offering circular does not constitute a notice of redemption for the Dollar Secured Notes. Holders of the Dollar Secured Notes should refer to the applicable notice of redemption delivered to the registered holders of such notes.

The Euro Secured Notes bear interest at a rate of 4.750% per annum and are scheduled to mature on October 1, 2024. The information contained in this offering circular does not constitute a notice of redemption for the Euro Secured Notes. Holders of the Euro Secured Notes should refer to the applicable notice of redemption delivered to the registered holders of such notes.

Certain of the initial purchasers and/or their affiliates may be holders of the Existing Secured Notes, which we intend to redeem in full with the proceeds of this offering. Accordingly, such initial purchasers and/or their affiliates may receive a portion of the proceeds from this offering of the notes in their capacities as holders of the Existing Secured Notes. To the extent the New Term Loan Facility is not consummated, we anticipate we will use the net proceeds of this offering to redeem a portion of the Existing Secured Notes. See “Plan of Distribution.”

CAPITALIZATION

The following table sets forth our consolidated cash and cash equivalents and capitalization as of September 30, 2020 on:

- an actual basis; and
- an as adjusted basis to give effect to the Refinancing Transactions.

You should read this table in conjunction with "Summary—The Offering," "Summary—Summary Historical Financial and Other Data" included elsewhere in this offering circular, as well as "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our unaudited condensed consolidated financial statements and the related notes thereto in our Quarterly Reports, which are incorporated by reference in this offering circular.

	As of September 30, 2020	
	Actual	As Adjusted
(dollars in millions)	(unaudited)	
Cash and cash equivalents(1)	$ 370.5	$ 195.5
Debt:		
Revolver (2)	—	—
A/R Facility (3)	—	40.0
Term Loan Facility		
Existing Dollar Term Loan Facility	609.7	609.7
Existing Euro Term Loan Facility(4)	368.8	368.8
New Term Loan Facility(5)	—	1,350.0
4.750% Senior First Lien Notes due 2024(5)(6)	586.7	—
6.000% Senior First Lien Notes due 2024(5)	1,500.0	—
4.625% Senior Notes due 2028	1,550.0	1,550.0
3.875% Senior Notes due 2028(7)	469.3	469.3
Notes offered hereby(8)	—	649.6
Other(9)	71.0	71.0
Total debt, gross	5,155.5	5,108.4
Less: unamortized deferred financing costs(10)	(84.6)	(84.6)
Total debt	5,070.9	5,023.8
Total stockholders' equity	2,552.3	2,552.3
Total capitalization	$ 7,623.2	$ 7,576.1

(1) As adjusted amount reflects the use of approximately $175.0 million of cash and cash equivalents to finance, in part, the redemption of the Existing Secured Notes and the payment of fees and expenses related to this offering.

(2) As of September 30, 2020, the Company had $515.0 million of availability under the Revolver (excluding $1.6 million of undrawn letters of credit).

(3) As of September 30, 2020, there were no borrowings outstanding under our A/R Facility and we would have had $300.0 million of available borrowings thereunder (excluding $12.3 million of undrawn letters of credit). In connection with the Refinancing Transactions, we intend to borrow approximately $40.0 million under the A/R Facility based on the current euro exchange rates. Actual amounts drawn under the A/R Facility, if any, will depend on the euro exchange rate on or about the closing date of this offering.

(4) Reflects the U.S. dollar equivalent of the €314.3 million in aggregate principal amount of the senior secured euro term loans. Represents an exchange rate of $1.1733 to €1.00, determined as of September 30, 2020.

(5) There is no assurance that the New Term Loan Facility will be incurred on the terms proposed, or at all, and the offering of the notes is not conditioned on the completion of the New Term Loan Facility. To the extent the New Term Loan Facility is not consummated, we anticipate we will use the net proceeds of this offering to redeem a portion of the Existing Secured Notes.

(6) On a historical basis, reflects the U.S. dollar equivalent of the €500.0 million in aggregate principal amount of the 4.750% Senior First Lien Notes due 2024. Represents an exchange rate of $1.1733 to €1.00, determined as of September 30, 2020.

(7) As adjusted amount reflects the U.S. dollar equivalent of the €400.0 million in aggregate principal amount of the 3.875% Senior Notes due 2028. Represents an exchange rate of $1.1733 to €1.00, determined as of September 30, 2020.

(8) As adjusted amount reflects the U.S. dollar equivalent of the issuance of €550.0 million aggregate principal amount of the notes offered hereby, excluding initial purchasers' discounts. The amount of the notes offered hereby is based on the daily foreign exchange rate as published by Bloomberg of $1.1810 to €1.00 as of October 26, 2020. Assumes the notes will be issued at par.
(9) On a historical basis, Other debt consists primarily of $71.0 million of finance lease liabilities.
(10) As adjusted amount does not give effect to any unamortized deferred issuance costs, which may be incurred in connection with the Refinancing Transactions.

DESCRIPTION OF NOTES

General

The Issuer will issue €550,000,000 aggregate principal amount of % senior first lien notes due 2025 (the "*Notes*") pursuant to an indenture to be dated as of the Issue Date (the "*Indenture*") among the Issuer, the Guarantors and The Bank of New York Mellon Trust Company, N.A., as trustee (the "*Trustee*") and as collateral agent (the "*Notes Collateral Agent*"). The Indenture will not be subject to the provisions of the Trust Indenture Act of 1939, as amended. The Notes will be issued in a private transaction that is not subject to the registration requirements of the Securities Act. See "Transfer Restrictions." Application will be made to The International Stock Exchange Authority Limited for the listing of, and permission to deal in, the Notes on the Official List of The International Stock Exchange (the "*Exchange*") and for the Notes to be admitted to trading thereto. There can be no assurance that this application will be accepted.

The following description is only a summary of certain provisions of the Indenture, the Notes, the Guarantees, the First Lien Intercreditor Agreement and the Security Documents, does not purport to be complete and is subject to, and is qualified in its entirety by reference to, the provisions of the Indenture, the Notes, the First Lien Intercreditor Agreement and the Security Documents, including the definitions of certain terms used therein. We urge you to read each of these documents because they, and not this description, will define your rights as Holders. You may request copies of these agreements at our address set forth under the heading "Summary."

In this section of the Offering Circular, references to the "*Issuer*" are to Avantor Funding, Inc., a Delaware corporation, and not any of its Subsidiaries.

Brief Description of Notes

The Notes will be:

- general senior debt obligations of the Issuer;
- senior in right of payment to any future Subordinated Indebtedness of the Issuer;
- *pari passu* in right of payment with all existing and future Senior Indebtedness (including the Senior Credit Facilities and the Existing Unsecured Notes) of the Issuer;
- secured on a first-priority basis by the Collateral owned by the Issuer, subject to certain Liens permitted under the Indenture;
- equal in priority as to the Collateral owned by the Issuer with respect to any Obligations under any other First Lien Obligations of the Issuer, including the Senior Credit Facilities;
- effectively senior to all existing and future unsecured Indebtedness of the Issuer, including the Existing Unsecured Notes, to the extent of the value of the Collateral owned by the Issuer;
- effectively subordinated to any existing or future Indebtedness of the Issuer that is secured by Liens on assets that do not constitute a part of the Collateral to the extent of the value of such assets;
- structurally subordinated to all existing and future Indebtedness and other claims and liabilities, including Preferred Stock of Subsidiaries of the Issuer that are not Subsidiary Guarantors, including the A/R Facility; and
- guaranteed on a senior basis by Holdings and each Domestic Subsidiary that is a Wholly-Owned Subsidiary of Holdings (other than the Issuer) that incurs or guarantees any Obligations under the Senior Credit Facilities.

Guarantees

On the Issue Date, Holdings and each Domestic Subsidiary that is a Wholly-Owned Subsidiary of Holdings (other than the Issuer) that is a borrower or guarantor of any Obligations under the Senior Credit Facilities, as a primary obligor and not merely as surety, will jointly and severally fully and unconditionally guarantee, on a senior basis, the performance and full and punctual payment when due, whether at maturity, by acceleration or otherwise, of all Obligations of the Issuer under the Notes and the Indenture, whether for payment of principal of, premium on, if any, or interest on the Notes, expenses, indemnification or otherwise, on the terms set forth in the Indenture by executing the Indenture.

As further described under "Certain Covenants—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries," each Domestic Subsidiary that is a Wholly-Owned Subsidiary of Holdings (other than the Issuer) that incurs or guarantees any Obligations under the Senior Credit Facilities or certain future Indebtedness of the Issuer or any other Guarantor (and any Domestic Subsidiary of the Issuer that is a non-Wholly-Owned Subsidiary if such non-Wholly-Owned Subsidiary guarantees the Senior Credit Facilities or certain other capital markets debt securities of the Issuer or any other Guarantor) will, subject to certain exceptions and to release as provided below or elsewhere in this "Description of Notes," guarantee the Notes.

The Guarantee of each Guarantor will be:

- a general senior obligation of such Guarantor;
- senior in right of payment to all existing and future Subordinated Indebtedness of such Guarantor;
- *pari passu* in right of payment with all existing and future Senior Indebtedness of such Guarantor (including its guarantee of all Obligations under the Senior Credit Facilities and the Existing Unsecured Notes);
- secured on a first-priority basis by the Collateral owned by such Guarantor, subject to certain Liens permitted under the Indenture;
- equal in priority as to the Collateral owned by such Guarantor with respect to any Obligations under any other First Lien Obligations of such Guarantor, including such Guarantor's guarantee of the Senior Credit Facilities;
- effectively senior to all existing and future unsecured Indebtedness of such Guarantor to the extent of the value of the Collateral owned by such Guarantor;
- effectively subordinated to any existing or future Indebtedness of such Guarantor that is secured by Liens on assets that do not constitute a part of the Collateral to the extent of the value of such assets; and
- structurally subordinated to all existing and future Indebtedness and other claims and liabilities, including Preferred Stock of any Subsidiaries of such Guarantor that are not Subsidiary Guarantors, including the A/R Facility.

Not all of the Issuer's Subsidiaries will guarantee the Notes and the Guarantees provided may be released in certain circumstances. See "Risk Factors—Risks Related to our Indebtedness and the Notes—The notes and the note guarantees will be structurally subordinated to all liabilities of the Issuer's non-guarantor Subsidiaries." In the event of a bankruptcy, liquidation or reorganization of any of these non-guarantor Subsidiaries, such non-guarantor Subsidiaries will pay the holders of their debt and their trade creditors before they will be able to distribute any of their assets to the Issuer or any other Guarantor.

Excluding the effect of intercompany balances as well as intercompany transactions, after giving pro forma effect to the Refinancing Transactions, the non-guarantor Subsidiaries of the Issuer accounted for approximately

$2,719.6 million, or 44%, of its net sales for the twelve months ended September 30, 2020, and approximately $5,691.7 million, or 57%, of its total assets as of September 30, 2020, and would have accounted for approximately $57.4 million, or 1.1%, of its total gross indebtedness including capital lease obligations as of September 30, 2020.

Any Guarantor that makes a payment under its Guarantee will be entitled upon payment in full of all guaranteed Obligations under the Indenture to a contribution from each other Guarantor in an amount equal to such other Guarantor's pro rata portion of such payment based on the respective net assets of all the Guarantors at the time of such payment determined in accordance with GAAP.

The obligations of each Guarantor under its Guarantee will be limited as necessary to prevent such Guarantee from constituting a fraudulent conveyance under applicable law and, therefore, are limited to the amount that such Guarantor could guarantee without such Guarantee constituting a fraudulent conveyance; this limitation, however, may not be effective to prevent such Guarantee from constituting a fraudulent conveyance. If a Guarantee were rendered voidable, it could be subordinated by a court to all other indebtedness (including guarantees and other contingent liabilities) of the applicable Guarantor, and, depending on the amount of such indebtedness, a Guarantor's liability on its Guarantee could be reduced to zero. See "Risk Factors—Risks Related to Our Indebtedness and the Notes—Federal and state fraudulent transfer laws may permit a court to void the notes and/or the note guarantees and, if that occurs, you may not receive any payments on the notes."

Release of Guarantees

Each Guarantee by a Guarantor will provide by its terms that its Obligations under the Indenture and such Guarantee will be automatically and unconditionally released and discharged upon:

(a) in the case of a Subsidiary Guarantor, any sale, exchange, issuance, transfer or other disposition (by merger, consolidation, amalgamation, dividend, distribution or otherwise) of (i) the Capital Stock of such Subsidiary Guarantor (including any sale, exchange or transfer), after which the applicable Subsidiary Guarantor is no longer a Restricted Subsidiary or (ii) all or substantially all of the assets of such Subsidiary Guarantor, in each case, if such sale, exchange, issuance, transfer or other disposition is not prohibited by the applicable provisions of the Indenture (including any amendments thereof);

(b) (i) the release or discharge of the guarantee by, or direct obligation of, such Guarantor with respect to the Senior Credit Facilities or (ii) the release or discharge of such other guarantee or direct obligation that resulted in the creation of such Guarantee except, in the case of clauses (i) or (ii), a discharge or release by or as a result of payment under such guarantee or direct obligation (it being understood that a release subject to a contingent reinstatement is still a release);

(c) in the case of a Subsidiary Guarantor, the designation of any Restricted Subsidiary that is a Subsidiary Guarantor as an Unrestricted Subsidiary in compliance with the applicable provisions of the Indenture;

(d) the Issuer exercising its legal defeasance option or covenant defeasance option as described under "—Legal Defeasance and Covenant Defeasance" or the Issuer's obligations under the Indenture being discharged in accordance with the terms of the Indenture;

(e) the merger, amalgamation, consolidation, winding up or Division of any Subsidiary Guarantor with and into the Issuer or another Subsidiary Guarantor that is the surviving Person in such merger, amalgamation, consolidation, winding up or Division or upon the liquidation of such Subsidiary Guarantor; or

(f) the occurrence of a Covenant Suspension Event; *provided* that such Guarantee will not be released pursuant to this clause (f) for so long as such Guarantor is an obligor with respect to any Indebtedness under the Senior Credit Facilities or the Existing Unsecured Notes.

Ranking

The payment of the principal of, premium, if any, and interest on the Notes and the payment of any Guarantee will be Senior Indebtedness of the Issuer or the applicable Guarantor, as the case may be, and will rank equal in right of payment with all existing and future Senior Indebtedness of the Issuer and the Guarantors, as the case may be, including the Obligations of the Issuer and such Guarantor under the Senior Credit Facilities and the Existing Unsecured Notes. The payment of the principal of, premium, if any, and interest on the Notes and the payment of any Guarantee will be secured by the Collateral, which Collateral will be shared on an equal and ratable basis with any other First Lien Obligations, including the Senior Credit Facilities. The Obligations under the Notes, the Indenture, the Guarantees and any other First Lien Obligations will have a first-priority security interest with respect to the Collateral. Obligations under the Senior Credit Facilities will also be secured by the Collateral and will have a first-priority security interest with respect to the Collateral, subject to certain Liens permitted under the Indenture. The phrase "in right of payment" refers to the contractual ranking of a particular Obligation, regardless of whether an Obligation is secured.

A significant portion of the operations of the Issuer are conducted through the Issuer's Subsidiaries. Claims of creditors of any non-guarantor Subsidiaries of the Issuer, including trade creditors and creditors holding Indebtedness or guarantees issued by such non-guarantor Subsidiaries, and claims of preferred stockholders of such non-guarantor Subsidiaries generally will have priority with respect to the assets and earnings of such non-guarantor Subsidiaries over the claims of our creditors, including Holders, even if such claims do not constitute Senior Indebtedness. Accordingly, the Notes will be structurally subordinated to creditors (including trade creditors) and preferred stockholders, if any, of such non-guarantor Subsidiaries, other than Indebtedness and liabilities owed to the Issuer or a Guarantor.

As of September 30, 2020, on an as-adjusted basis after giving effect to the Transactions as described under "Use of Proceeds," the Issuer and the Guarantors would have had:

(1) $2,978.1 million of Secured Indebtedness, consisting of Indebtedness secured on a first-priority basis by the Collateral, consisting of Secured Indebtedness under the Senior Credit Facilities and the Notes (excluding $71.0 million of our Financing Lease Obligations), with $515.0 million of unused availability under our revolving credit facility (excluding issued but undrawn letters of credit); and

(2) $2,019.3 million equivalent of unsecured Senior Indebtedness (including the Existing Unsecured Notes).

Concurrently with this offering, we intend to enter into the New Term Loan Facility. Although the Indenture will contain limitations on the amount of First Lien Obligations and additional Secured Indebtedness that the Issuer and the Restricted Subsidiaries may incur, under certain circumstances the amount of such First Lien Obligations and Secured Indebtedness could be substantial. See "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" and "Certain Covenants—Liens." In addition, although the Indenture will limit the incurrence of Indebtedness by, and the issuance of Disqualified Stock and Preferred Stock of, the Restricted Subsidiaries, such limitation is subject to a number of significant exceptions and qualifications and the Indebtedness incurred and Disqualified Stock and Preferred Stock issued in compliance with the covenants could be substantial. See "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock." Moreover, the Indenture does not impose any limitation on the incurrence or issuance by such Subsidiaries of liabilities that are not considered Indebtedness, Disqualified Stock or Preferred Stock under the Indenture.

Paying Agents and Registrars for the Notes

The Issuer will maintain one or more paying agents for the Notes. The initial paying agent for the Notes will be The Bank of New York Mellon, London Branch. The paying agent will make payments on the Notes on behalf of the Issuer.

The Issuer will also maintain one or more registrars with respect to the Notes. The initial registrar for the Notes will be the Trustee. The registrar will maintain a register reflecting ownership of the Notes outstanding from time to time and will make payments on and facilitate transfer of Notes on behalf of the Issuer.

The Issuer may change the paying agents or the registrars without prior notice to the Holders. The Issuer or any of its Subsidiaries may act as a paying agent or registrar.

Transfer and Exchange

A Holder may transfer or exchange Notes in accordance with the Indenture and the restrictions set forth in the section of the Offering Circular entitled "Transfer Restrictions." The registrar and the Trustee may require a Holder to furnish appropriate endorsements and transfer documents in connection with a transfer of Notes. Holders will be required to pay all taxes and fees required by law and due on transfer. The Issuer will not be required to transfer or exchange any Note selected for redemption or tendered (and not withdrawn) for repurchase in connection with a Change of Control Offer, an Alternate Offer, an Asset Sale Offer, an Advance Offer, Collateral Advance Offer or other tender offer. Also, the Issuer will not be required to transfer or exchange any Note for a period of 10 days before delivering a notice of redemption of Notes to be redeemed.

The registered Holder will be treated as the owner of the Note for all purposes.

Principal, Maturity and Interest

The Issuer will issue €550,000,000 aggregate principal amount of Notes in this offering. The Notes will mature on , 2025. Subject to compliance with the covenant described below under the caption "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," the Issuer may issue additional Notes ("*Additional Notes*") from time to time after this offering under the Indenture. The Notes offered hereby and any Additional Notes subsequently issued under the Indenture will be treated as a single class (except as otherwise provided) for all purposes under the Indenture, including waivers, amendments, redemptions and offers to purchase; *provided*, *however*, that a separate Common Code or ISIN will be issued for the Additional Notes, unless the Notes and the Additional Notes are treated as fungible for U.S. federal income tax purposes. Unless the context requires otherwise, references to "*Notes*" for all purposes of the Indenture, the Guarantees and this "Description of Notes" include any Additional Notes that are actually issued.

Interest on the Notes will accrue at the rate of % per annum. Interest on the Notes will be payable in cash semi-annually in arrears on and , commencing on , 2021, to the Holders of record as of the close of business (if applicable) on the immediately preceding and (whether or not a Business Day). Interest on the Notes will accrue from the most recent date to which interest has been paid or duly provided for or, if no interest has been paid or duly provided for, from and including the Issue Date. Interest on the Notes will be computed on the basis of a 360-day year comprised of twelve 30-day months. The Notes will be issued in minimum denominations of €100,000 and any integral multiple of €1,000 in excess thereof.

Principal of, premium, if any, and interest on the Notes will be payable at the office or agency of the paying agent maintained for such purpose as described under "—Paying Agents and Registrars for the Notes" or, at the option of the Issuer, payment of interest may be made by check mailed to the Holders at their respective addresses set forth in the register of Holders or by wire transfer; *provided* that all payments of principal, premium, if any, and interest with respect to the Notes represented by one or more global notes registered in the name or held by the common depository of Euroclear or Clearstream or its nominee will be made in accordance with Euroclear's and/or Clearstream's applicable procedures. Until otherwise designated by the Issuer, the Issuer's office or agency will be the office of the Trustee maintained for such purpose. If any interest payment date, the maturity date or any earlier required repurchase or Redemption Date falls on a day that is a Legal Holiday, the required payment will be made on the next succeeding Business Day and no interest on such payment will accrue in respect of the delay.

Security for the Notes

Collateral Generally

The Notes and the Guarantees thereof will be secured on a *pari passu* basis with the obligations under the Senior Credit Facilities by perfected first-priority security interests in the same assets and property that constitute the Collateral that secure the Senior Credit Facility Obligations. The First Lien Secured Parties other than the Holders have rights and remedies with respect to the Collateral that, if exercised, could also adversely affect the value of the Collateral benefiting the Holders, particularly the rights described below under "First Lien Intercreditor Agreement."

The Issuer and the Guarantors are and will be able to incur additional Indebtedness in the future which could share in the Collateral, including Additional First Lien Obligations and Obligations secured by Permitted Liens. With respect to the Issuer and the Subsidiary Guarantors, the amount of such additional Obligations will be limited by the covenant described under "Certain Covenants—Liens" and the covenant described under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock." Under certain circumstances, the amount of any such additional Obligations could be significant.

Certain Limitations on the Collateral

The Collateral securing the Notes will not include any of the following assets (the "*Excluded Assets*"):

(1) any fee owned real property (including the Phillipsburg Real Property and other than Material Real Properties), any leasehold rights and interests in real property (it being understood that there shall be no requirement to obtain any landlord waivers, estoppels or collateral access letters);

(2) motor vehicles and other assets subject to certificates of title to the extent perfection of the security interest in such assets cannot be accomplished by the filing of a UCC financing statement (or equivalent);

(3) any lease, license or other agreement or any property subject to a purchase money security interest, capital lease obligation or similar arrangements, in each case to the extent permitted under the Indenture and the Security Documents, to the extent that a grant of a security interest therein would violate or invalidate such lease, license or agreement, purchase money, capital lease or a similar arrangement or create a right of termination in favor of any other party thereto (other than Holdings or any of its Subsidiaries), in each case, after giving effect to the applicable anti-assignment provisions of the Uniform Commercial Code or other applicable law, but excluding the proceeds and receivables thereof, the assignment of which is expressly deemed effective under applicable law notwithstanding such prohibition;

(4) those assets to the extent that a grant of a security interest in such assets (A) is prohibited by contract (including leases and licenses) binding on such assets at the time of acquisition thereof and not entered into in contemplation of such acquisition, applicable law or regulation, or any governmental licenses or state or local franchises, charters and authorizations, in each case, after giving effect to the applicable anti-assignment provision of the UCC and other applicable law, or (B) requires governmental consents required pursuant to applicable law that have not been obtained (after the exercise of commercially reasonable efforts to obtain such consent) in each case, after giving effect to the applicable anti-assignment provisions of the UCC and other applicable law, but excluding the proceeds thereof, the assignment of which is expressly deemed effective under applicable law notwithstanding such prohibition;

(5) margin stock, and to the extent requiring the consent of one or more third parties (other than Holdings and its Subsidiaries) or prohibited by the terms of such Person's organizational or joint venture documents after giving effect to the applicable anti-assignment provisions of the Uniform Commercial Code or other applicable law, Equity Interests in any Person other than wholly-owned Subsidiaries, but excluding the proceeds thereof, the assignment of which is expressly deemed effective under applicable law notwithstanding such prohibition;

(6) [reserved];

(7) any property subject to (A) a Permitted Lien under clause (12)(a) of the definition of "Permitted Liens" securing Indebtedness permitted to be incurred pursuant to clause (4) of the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock"; *provided* that (i) such Liens are created within 365 days of the acquisition, construction, repair, lease or improvement of the property subject to such Liens, (ii) such Liens do not at any time encumber property (except for replacements, additions, accessions and proceeds to such property) other than the property financed by such Indebtedness and the proceeds and products thereof and customary security deposits and (iii) with respect to Financing Lease Obligations, such Liens do not at any time extend to or cover any assets (except for replacements, additions and accessions to such assets) other than the assets subject to such Financing Lease Obligations and the proceeds and products thereof and customary security deposits; *provided* that individual financings of equipment provided by one lender may be cross collateralized to other financings of equipment provided by such lender, or (B) the modification, replacement, renewal or extension of any Lien contemplated under the foregoing clause (A) that is a Permitted Lien under clause (32) of the definition of "Permitted Liens", to the extent that the granting of a security interest in such property would be prohibited under the terms of the Indebtedness secured thereby so long as such prohibition is not incurred in contemplation of, the acquisition of such property after giving effect to the applicable anti-assignment provisions of the Uniform Commercial Code, other than the proceeds and receivables thereof the assignment of which is expressly deemed effective under the Uniform Commercial Code notwithstanding such prohibition or restriction;

(8) any intent-to-use trademark application prior to the accepted filing of a "Statement of Use" and issuance of a "Certificate of Registration" or an accepted filing of an "Amendment to Allege Use" whereby such intent-to-use trademark application is converted to a "use in commerce" application, solely to the extent that, and during the period, if any, in which the grant of a security interest therein would impair the validity or enforceability of, or void, such intent-to-use trademark application or any registration that may issue therefrom under applicable federal law;

(9) assets where the cost of creating or perfecting such pledges or security interests in such assets or obtaining title insurance, surveys, abstracts or appraisals in respect of such assets are excessive in relation to the practical benefits to be obtained therefrom, as determined by the Bank Collateral Agent pursuant to the Senior Credit Facilities;

(10) Equity Interests of captive insurance subsidiaries;

(11) Equity and assets Interests of Unrestricted Subsidiaries;

(12) [reserved];

(13) Equity Interests in excess of 65% of the outstanding voting Equity Interests of each Subsidiary that is (A) a CFC or (B) a FSHCO;

(14) Equity Interests of any Immaterial Subsidiaries that are not Guarantors;

(15) Equity Interests of not-for-profit Subsidiaries, any Securitization Subsidiary formed for the purpose of, and that solely engages only in one or more Qualified Securitization Facilities and other activities reasonably related thereto;

(16) Equity Interests of any direct or indirect Subsidiary of a direct or indirect Subsidiary of Holdings that is (A) a CFC or (B) a FSHCO;

(17) letter-of-credit rights and commercial tort claims, in each case in an amount less than $1,000,000, except to the extent a security interest therein can be perfected by the filing of a Uniform Commercial Code financing statement;

(18) to the extent segregated and used exclusively to hold funds in trust for the benefit of unaffiliated third parties, (A) payroll, healthcare and other employee wage and benefit accounts, (B) tax accounts, including, without limitation, sales tax accounts, (C) escrow, defeasance and redemption accounts and (D) fiduciary or trust accounts and, in the case of clauses (A) through (D), the funds or other property held in or maintained in any such account; and

(19) so long as the Senior Credit Facilities remain outstanding, any asset that is not pledged to secure obligations arising in respect of the Senior Credit Facilities (whether pursuant to the terms of the credit agreement governing the Senior Credit Facilities (and any related documents) or as a result of any determination made thereunder, or by amendment, waiver or otherwise);

provided, *however*, that Excluded Assets shall not include (x) any assets that are pledged to secure obligations arising in respect of the Senior Credit Facilities (whether pursuant to the terms of the credit agreement governing the Senior Credit Facilities (and any related documents) or any amendment or otherwise) and (y) any Proceeds, substitutions replacements of any Excluded Assets referred to in clauses (1) through (19) (unless such Proceeds, substitutions or replacements would independently constitute Excluded Assets referred to in clauses (1) through (19).

The security interests in the Collateral securing the Notes (other than as set forth in the following proviso) will not be perfected on the Issue Date, but will be required to be put in place as promptly as practicable thereafter and in any event no later than 90 days after the Issue Date; *provided*, *however*, the perfection of the security interests (1) in the certificated Equity Interests of the Issuer and the Issuer's Material Domestic Subsidiaries will be required to be delivered on or prior to the Issue Date to the Controlling Collateral Agent and (2) in other assets with respect to which a Lien may be perfected by the filing of a UCC financing statement (or equivalent), which UCC financing statement (or equivalent) will be required to be filed as of the Issue Date.

In addition:

(a) Liens required to be granted from time to time pursuant to the Indenture shall be subject to exceptions and limitations set forth in the Security Documents;

(b) control agreements or other control or similar arrangements shall not be required with respect to deposit accounts, securities accounts, commodities accounts or other assets requiring perfection by control agreements;

(c) no actions in any non-U.S. jurisdiction or required by the laws of any non-U.S. jurisdiction shall be required to be taken to create any security interests in assets located or titled outside of the United States (including any Equity Interests of any Foreign Subsidiary and foreign intellectual property) or to perfect or make enforceable any security interests in any such assets (it being understood that there shall be no Security Document (or other security agreements or pledge agreements) governed under the laws of any non-U.S. jurisdiction); and

(d) no actions shall be required to perfect a security interest in letter of credit rights (other than the filing of a UCC financing statement).

Furthermore, accounts receivable and related assets that secure the A/R Facility, are not permitted to be subject to any other liens. Accordingly, such receivables and related assets will not constitute Collateral securing the Notes.

Notwithstanding anything to the contrary, prior to the discharge of the First Lien Obligations, to the extent that the Bank Collateral Agent (as defined below) is satisfied with or agrees to any deliveries or documents required to be provided in respect of any matters relating to the Collateral or makes any determination in respect of any matters relating to the Collateral (including, without limitation, extensions of time or waivers for the creation and perfection of security interests in, or the obtaining of title insurance, legal opinions or other deliverables with respect to, particular assets (including in connection with assets acquired, or Subsidiaries formed or acquired, after the Issue

Date) where it determines that such action cannot be accomplished without undue effort or expense by the time or times at which it would otherwise be required to be accomplished by the Senior Credit Facilities or the Security Documents), the Indenture and the Security Documents by which the Notes Collateral Agent is bound shall be deemed to be fully complied with and satisfied by such deliveries or documents accepted by, or determinations made by, the Bank Collateral Agent, and the Notes Collateral Agent shall have no liability in connection therewith.

After-Acquired Collateral

From and after the Issue Date and subject to certain limitations and exceptions, if the Issuer or any Guarantor acquires any property or rights which are of a type constituting Collateral under any Security Document (excluding, for the avoidance of doubt, any Excluded Assets or assets not required to be Collateral pursuant to the Security Documents), it will be required to execute and deliver such security instruments, financing statements and such certificates and opinions of counsel as are required under the Indenture or any Security Document to vest in the Notes Collateral Agent a perfected security interest (subject to Permitted Liens) in such after-acquired collateral and to take such actions to add such after-acquired collateral to the Collateral, and thereupon all provisions of the Indenture and the Security Documents relating to the Collateral shall be deemed to relate to such after-acquired collateral to the same extent and with the same force and effect. Notwithstanding the foregoing, opinions of counsel will not be required in connection with the addition of new Guarantors or in connection with such Guarantors entering into the Security Documents or to vest in the Notes Collateral Agent a perfected security interest in such after-acquired collateral.

Further Assurances

On or following the Issue Date and subject to the First Lien Intercreditor Agreement, the Issuer and the Guarantors shall execute any and all further documents, financing statements (including continuation statements and amendments to financing statements), agreements and instruments, and take all further action that may be required under applicable law in order to grant, preserve, maintain, protect and perfect (or continue the perfection of) the validity and priority of the security interests created or intended to be created by the Security Documents in the Collateral. In addition, from time to time, the Issuer and each Guarantor will reasonably promptly secure the obligations under the Indenture and the Security Documents by pledging or creating, or causing to be pledged or created, perfected security interests with respect to the Collateral. Such security interests and Liens will be created under the Security Documents and other security agreements, mortgages, deeds of trust and other instruments and documents.

Liens with Respect to the Collateral

The Issuer, the Guarantors and the Notes Collateral Agent will enter into the Security Documents establishing the terms of the security interests with respect to the Collateral. These security interests will secure the payment and performance when due of all of the First Lien Notes Obligations of the Issuer and the Guarantors.

First Lien Intercreditor Agreement

On the Issue Date, the Notes Collateral Agent will become party to the intercreditor agreement dated as of November 21, 2017 (as the same may be amended from time to time, the "*First Lien Intercreditor Agreement*") with respect to the Collateral, to which the Bank Collateral Agent is party to and which may be amended from time to time without the consent of the Holders to add other parties holding First Lien Obligations permitted to be incurred under the Indenture, the Senior Credit Facility and the First Lien Intercreditor Agreement.

Under the First Lien Intercreditor Agreement, only the "*Controlling Collateral Agent*" has the right to act or refrain from acting with respect to any Shared Collateral. The Bank Collateral Agent is the Controlling Collateral Agent and will remain so until the earlier of (1) the Discharge of First Lien Obligations that are Senior Credit Facility Obligations and (2) the Non-Controlling Collateral Agent Enforcement Date (such earlier date, the "*Controlling Collateral Agent Change Date*"). After the Controlling Collateral Agent Change Date, the Controlling Collateral Agent will be the Collateral Agent (other than the Bank Collateral Agent) of the Series of First Lien Obligations that constitutes the largest outstanding aggregate principal amount of any then outstanding Series of

First Lien Obligations (excluding the Series of Senior Credit Facility Obligations) with respect to such Shared Collateral, but solely to the extent that such Series of First Lien Obligations has a larger aggregate principal amount than the Series of Senior Credit Facility Obligations then outstanding (the "*Major Non-Controlling Collateral Agent*").

With respect to any Shared Collateral, no Non-Controlling Collateral Agent or other Non-Controlling Secured Party shall or shall instruct the Controlling Collateral Agent to, commence any judicial or nonjudicial foreclosure proceedings with respect to, seek to have a trustee, receiver, liquidator or similar official appointed for or over, attempt any action to take possession of, exercise any right, remedy or power with respect to, or otherwise take any action to enforce its security interest in or realize upon, or take any other action available to it in respect of, any Shared Collateral.

The "*Non-Controlling Collateral Agent Enforcement Date*" means, with respect to any Non-Controlling Collateral Agent, the date that is 90 days (throughout which 90-day period such Non-Controlling Collateral Agent was the Major Non-Controlling Collateral Agent) after the occurrence of both (a) an event of default, as defined in the indenture or other debt facility for the applicable Series of First Lien Obligations, and (b) the Controlling Collateral Agent and each other Collateral Agent's receipt of written notice from such Non-Controlling Collateral Agent certifying that (i) such Non-Controlling Collateral Agent is the Major Non-Controlling Collateral Agent and that an event of default, as defined in the indenture or other debt facility for that Series of First Lien Obligations has occurred and is continuing and (ii) the First Lien Obligations of that Series are currently due and payable in full (whether as a result of acceleration thereof or otherwise) in accordance with the indenture or debt facility for that Series of First Lien Obligations; *provided* that the Non-Controlling Collateral Agent Enforcement Date will be stayed and will not occur and will be deemed not to have occurred with respect to any Shared Collateral (1) at any time the Controlling Collateral Agent has commenced and is diligently pursuing any enforcement action with respect to such Shared Collateral or (2) at any time the Issuer or the Guarantor that has granted a security interest in such Shared Collateral is then a debtor under or with respect to (or otherwise subject to) any insolvency or liquidation proceeding.

While the Bank Collateral Agent (or any other Collateral Agent) is the Controlling Collateral Agent, the Notes Collateral Agent will have no rights to take any action under the First Lien Intercreditor Agreement with respect to the Shared Collateral unless and until it becomes the Controlling Collateral Agent.

Notwithstanding the equal priority of the Liens with respect to the Shared Collateral, the Controlling Collateral Agent may deal with the Shared Collateral as if the Controlling Collateral Agent had a senior Lien on such Collateral. No Non-Controlling Collateral Agent or Non-Controlling Secured Party will contest, protest or object to any foreclosure proceeding or action brought by the Controlling Collateral Agent or any Controlling Secured Party or any other exercise by the Controlling Collateral Agent or any Controlling Secured Party of any rights and remedies relating to the Shared Collateral. Each of the First Lien Secured Parties also agree or will agree that it will not (and will waive any right to) contest or support any other person in contesting, in any proceeding (including any insolvency or liquidation proceeding), the perfection, priority, validity, attachment or enforceability of a Lien held by or on behalf of any of the First Lien Secured Parties in all or any part of the Collateral, or the provisions of the First Lien Intercreditor Agreement.

If an Event of Default or an event of default under any document governing a Series of First Lien Obligations has occurred and is continuing and the Controlling Collateral Agent is taking action to enforce rights in respect of any Shared Collateral, or any distribution is made with respect to any Shared Collateral in any insolvency or liquidation proceeding of the Issuer or any Guarantor (including any adequate protection payments) or any First Lien Secured Party receives any payment pursuant to any intercreditor agreement (other than the First Lien Intercreditor Agreement) with respect to any Shared Collateral, the proceeds of any sale, collection or other liquidation of any such Shared Collateral by any Collateral Agent or any First Lien Secured Party and proceeds of any such distribution or payment (subject, in the case of any such distribution, payments or proceeds, to the paragraph immediately following) to which the First Lien Obligations are entitled under such other intercreditor agreement shall be applied:

(A) FIRST, in payment of all amounts owing to each Collateral Agent (in its capacity as such); and

(B) SECOND, subject to the provisions of the First Lien Intercreditor Agreement, among the First Lien Obligations to the payment in full of the First Lien Obligations on a ratable basis, with such proceeds to be applied to the First Lien Obligations of a given Series in accordance with the terms of the applicable First Lien Documents for such Series; *provided* that following the commencement of any insolvency or liquidation proceeding of the Issuer or any Guarantor, solely as among the holders of First Lien Obligations and solely for purposes of this clause SECOND and not the indenture or other debt facility for the applicable Series of First Lien Obligations, in the event the value of the Shared Collateral is not sufficient for the entire amount of Post-Petition Interest on the First Lien Obligations to be allowed under Section 506(a) and (b) of the Bankruptcy Code or any other applicable provision of the Bankruptcy Code or other applicable bankruptcy law in such insolvency or liquidation proceeding, the amount of First Lien Obligations of each Series of First Lien Obligations shall include only the maximum amount of Post-Petition Interest on the First Lien Obligations allowable under Section 506(a) and (b) of the Bankruptcy Code or any other applicable provision of the Bankruptcy Code or other applicable bankruptcy law in such insolvency or liquidation proceeding. "*Post-Petition Interest*" for purposes of the First Lien Intercreditor Agreement means any interest or entitlement to fees or expenses or other charges that accrue after the commencement of any insolvency or liquidation proceeding, whether or not allowed or allowable as a claim in any such insolvency or liquidation proceeding; and

(C) THIRD, after the discharge of all First Lien Obligations, to the Grantors or their successors or assigns, as their interests may appear, or to whosoever may be lawfully entitled to receive the same.

It is the intention of the First Lien Secured Parties of each Series that the holders of First Lien Obligations of such Series (and not the First Lien Secured Parties of any other Series) bear the risk of (i) any determination by a court of competent jurisdiction that (x) any of the First Lien Obligations of such Series are unenforceable under applicable law or are subordinated to any other obligations (other than another Series of First Lien Obligations), (y) any of the First Lien Obligations of such Series do not have an enforceable security interest in any of the Collateral securing any other Series of First Lien Obligations and/or (z) any intervening security interest exists securing any other obligations (other than another Series of First Lien Obligations) on a basis ranking prior to the security interest of such Series of First Lien Obligations but junior to the security interest of any other Series of First Lien Obligations or (ii) the existence of any Collateral for any other Series of First Lien Obligations that is not Shared Collateral (any such condition referred to in the foregoing clauses (i) or (ii) with respect to any Series of First Lien Obligations, an "*Impairment*" of such Series); *provided* that the existence of a maximum claim with respect to Mortgaged Properties which applies to all First Lien Obligations shall not be deemed to be an Impairment of any Series of First Lien Obligations. In the event of any Impairment with respect to any Series of First Lien Obligations, the results of such Impairment shall be borne solely by the holders of such Series of First Lien Obligations, and the rights of the holders of such Series of First Lien Obligations (including, without limitation, the right to receive distributions in respect of such Series of First Lien Obligations permitted by the First Lien Intercreditor Agreement) set forth in the First Lien Intercreditor Agreement shall be modified to the extent necessary so that the effects of such Impairment are borne solely by the holders of the Series of such First Lien Obligations subject to such Impairment. Additionally, in the event the First Lien Obligations of any Series are modified pursuant to applicable law (including, without limitation, pursuant to Section 1129 of the Bankruptcy Code), any reference to such First Lien Obligations or the First Lien Documents governing such First Lien Obligations shall refer to such obligations or such documents as so modified.

None of the First Lien Secured Parties may institute in any suit, bankruptcy, insolvency or other proceeding any claim against the Controlling Collateral Agent or any other First Lien Secured Party seeking damages from or other relief by way of specific performance, instructions or otherwise with respect to any Shared Collateral. In addition, none of the First Lien Secured Parties may seek to have any Shared Collateral or any part thereof marshaled upon any foreclosure or other disposition of such Collateral. If any First Lien Secured Party obtains possession of any Shared Collateral or realizes any proceeds or payment in respect thereof pursuant to any First Lien Security Document or by the exercise of any rights available to it under applicable law or in any insolvency or liquidation proceeding or through any other exercise of remedies (including pursuant to any intercreditor agreement), at any time prior to the discharge of each of the First Lien Obligations, then it must hold such Shared Collateral, proceeds or payment in trust for the other First Lien Secured Parties and promptly transfer such Shared

Collateral, proceeds or payment to the Controlling Collateral Agent to be distributed in accordance with the First Lien Intercreditor Agreement.

Under the First Lien Intercreditor Agreement, if at any time the Controlling Collateral Agent forecloses upon or otherwise exercises remedies against any Shared Collateral resulting in a sale or disposition thereof, then (whether or not any insolvency or liquidation proceeding is pending at the time) the Liens in favor of the other Collateral Agents for the benefit of the Trustee and the Holders of the Notes and each other Series of First Lien Secured Parties upon such Shared Collateral will automatically be released and discharged. However, any proceeds of any Shared Collateral realized therefrom will be applied as described in the First Lien Intercreditor Agreement.

Certain Limitations Applicable in Bankruptcy Proceedings

If the Issuer or any Guarantor becomes subject to any bankruptcy case, the First Lien Intercreditor Agreement will provide that if the Issuer or any Guarantor shall, as debtor(s)-in-possession, move for approval of financing ("*DIP Financing*") to be provided by one or more lenders (the "*DIP Lenders*") under Section 364 of the Bankruptcy Code or the use of cash collateral under Section 363 of the Bankruptcy Code (in each case, or under any equivalent provision of any other applicable bankruptcy law), each First Lien Secured Party has agreed or will agree not to object to any such financing or to the Liens on the Shared Collateral securing the same (the "*DIP Financing Liens*") or to any use of cash collateral that constitutes Shared Collateral, unless the Controlling Collateral Agent or any Controlling Secured Party with respect to such Shared Collateral opposes or objects to such DIP Financing or such DIP Financing Liens or use of cash collateral (and (i) to the extent that such DIP Financing Liens are senior to the Liens on any such Shared Collateral for the benefit of the Controlling Secured Parties, each Non-Controlling Secured Party will subordinate its Liens with respect to such Shared Collateral on the same terms as the Liens of the Controlling Secured Parties (other than any Liens of any First Lien Secured Parties constituting DIP Financing Liens) are subordinated thereto, and (ii) to the extent that such DIP Financing Liens rank pari passu with the Liens on any such Shared Collateral granted to secure the First Lien Obligations of the Controlling Secured Parties, each Non-Controlling Secured Party will confirm the priorities with respect to such Shared Collateral as set forth in the First Lien Intercreditor Agreement), in each case so long as:

(A) First Lien Secured Parties of each Series retain the benefit of their Liens on all such Shared Collateral pledged to the DIP Lenders, including proceeds thereof arising after the commencement of such proceeding, with the same priority vis-a-vis all the other First Lien Secured Parties (other than any Liens of the First Lien Secured Parties constituting DIP Financing Liens) as existed prior to the commencement of the bankruptcy case;

(B) the First Lien Secured Parties of each Series are granted Liens on any additional collateral pledged to any First Lien Secured Parties as adequate protection or otherwise in connection with such DIP Financing or use of cash collateral, with the same priority vis-a-vis the First Lien Secured Parties (other than any Liens of the First Lien Secured Parties constituting DIP Financing Liens) as set forth in the First Lien Intercreditor Agreement;

(C) if any amount of such DIP Financing or cash collateral is applied to repay any of the First Lien Obligations, such amount is applied pursuant to the First Lien Intercreditor Agreement; and

(D) if any First Lien Secured Parties are granted adequate protection, including in the form of periodic payments, in connection with such DIP Financing or use of cash collateral, the proceeds of such adequate protection are applied pursuant to the First Lien Intercreditor Agreement;

provided that the First Lien Secured Parties of each Series will have a right to object to the grant of a Lien to secure the DIP Financing over any Collateral subject to Liens in favor of the First Lien Secured Parties of such Series or its representative that do not constitute Shared Collateral; and provided, further, that the First Lien Secured Parties receiving adequate protection shall not object to any other First Lien Secured Party receiving adequate protection comparable to any adequate protection granted to such First Lien Secured Parties in connection with a DIP Financing or use of cash collateral.

The First Lien Secured Parties acknowledge that the First Lien Obligations of any Series may, subject to the limitations set forth in the other First Lien Documents, be increased, extended, renewed, replaced, restated, supplemented, restructured, repaid, refunded, refinanced or otherwise amended or modified from time to time, all without affecting the priority of claims and application of proceeds set forth in the First Lien Intercreditor Agreement or the other provisions thereof defining the relative rights of the First Lien Secured Parties of any Series.

Second Lien Intercreditor Agreement

If the Issuer or any of the Guarantors were to incur Indebtedness secured by the Collateral with a Junior Lien Priority relative to the First Lien Obligations, the Bank Collateral Agent, the Notes Collateral Agent and the applicable Second Lien Collateral Agent will enter into an intercreditor agreement (as the same may be amended from time to time, the "*Second Lien Intercreditor Agreement*"). The Second Lien Intercreditor Agreement may be amended from time to time without the consent of the Holders to add other parties holding Second Lien Obligations and First Lien Obligations permitted to be incurred under the then extant relevant agreements, or their respective representatives.

Notwithstanding the date, time, manner or order of filing or recordation of any document or instrument or grant, attachment or perfection of any Liens granted to the Second Lien Collateral Agent or any Second Lien Secured Parties on the Collateral or of any Liens granted to any First Lien Secured Parties on the Collateral (or any actual or alleged defect in any of the foregoing) and notwithstanding any provision of the Uniform Commercial Code, any applicable law, any Second Lien Documents or any First Lien Documents or any other circumstance whatsoever, the Second Lien Collateral Agent and each other Second Lien Representative, in each case on behalf of itself and each Second Lien Secured Party under its Second Lien Documents, will agree that any Lien on the Collateral securing or purporting to secure any First Lien Obligations now or hereafter held by or on behalf of any First Lien Secured Parties or any First Lien Representative or other agent or trustee therefor, regardless of how acquired, whether by grant, statute, operation of law, subrogation or otherwise, shall have priority over and be senior in all respects and prior to any Lien on the Collateral securing or purporting to secure any Second Lien Obligations.

Pursuant to the terms of the Second Lien Intercreditor Agreement, prior to the Discharge of First Lien Obligations, the Controlling Collateral Agent or any person authorized by it will have the exclusive right to exercise any right or remedy with respect to the Collateral and will also have the exclusive right to determine and direct the time, method and place for exercising such right or remedy or conducting any proceeding with respect thereto.

The Second Lien Collateral Agent, for itself and on behalf of each Second Lien Secured Party, will agree pursuant to the Second Lien Intercreditor Agreement that it will not (and will waive any right to) take any action to, contest or support any other Person in contesting, in any proceeding (including any insolvency or liquidation proceeding), the validity, extent, perfection, priority, allowability or enforceability of a Lien securing, or claim asserted with respect to, any First Lien Obligations held (or purported to be held) by or on behalf of the Controlling Collateral Agent or any of the First Lien Secured Parties or any agent or trustee therefor in any Collateral or other collateral securing both the First Lien Obligations and any Second Lien Obligations. The Second Lien Intercreditor Agreement will provide for a reciprocal restriction on the ability of any Collateral Agent to contest or support any other Person in contesting, in any proceeding (including any insolvency or liquidation proceeding), the validity, extent, perfection, priority, allowability or enforceability of any Lien securing, or claim asserted with respect to, any Second Lien Obligations held (or purported to be held) by or on behalf of the Second Lien Collateral Agent or any of the Second Lien Secured Parties in the Collateral securing the Second Lien Obligations.

The Collateral or proceeds thereof received in connection with the sale or other disposition of, or collection on, such Collateral upon the exercise of remedies will be applied to the First Lien Obligations prior to application to any Second Lien Obligations in such order as specified in the relevant First Lien Security Documents until the Discharge of First Lien Obligations has occurred.

In addition, so long as the Discharge of First Lien Obligations has not occurred, none of the Grantors shall grant or permit any additional Liens on any asset or property of any Grantor to secure any Second Lien Obligations unless it has granted, or concurrently therewith grants, a Lien on such asset or property of such Grantor to secure the First Lien Obligations. If the Second Lien Collateral Agent or any Second Lien Secured Party holds or acquires any Lien on any assets or property of the Issuer or any Subsidiary securing any Second Lien Obligations that are not also

subject to the first-priority Liens securing First Lien Obligations under the First Lien Documents, the Second Lien Collateral Agent or such Second Lien Secured Party (i) will be obligated to notify the Controlling Collateral Agent promptly upon becoming aware thereof and, unless such Grantor shall promptly grant a similar Lien on such assets or property to the Collateral Agents as security for the First Lien Obligations, must assign such Lien to the Collateral Agents as security for the First Lien Obligations (but may retain a junior lien on such assets or property subject to the terms of the Second Lien Intercreditor Agreement) and (ii) until such assignment or such grant of a similar Lien to the Collateral Agents, will be deemed to also hold and have held such Lien for the benefit of the Collateral Agents as security for the First Lien Obligations. Any amounts received by or distributed to any Second Lien Secured Party pursuant to or as a result of any Lien granted in contravention of the foregoing shall be subject to the turnover and related provisions of the Second Lien Intercreditor Agreement.

If any First Lien Secured Party is required in any insolvency or liquidation proceeding or otherwise to disgorge, turn over or otherwise pay to the estate of the Issuer or any Guarantor (or any trustee, receiver or similar person therefor), because the payment of such amount was declared to be, or otherwise avoided as, fraudulent or preferential in any respect or for any other reason, any amount (a "*Recovery*"), whether received as proceeds of security, enforcement of any right of setoff, recoupment or otherwise, then the First Lien Obligations shall be reinstated to the extent of such Recovery and deemed to be outstanding as if such payment had not occurred and the First Lien Secured Parties shall be entitled to a future Discharge of First Lien Obligations with respect to all such recovered amounts. If the Second Lien Intercreditor Agreement shall have been terminated prior to such Recovery, the Second Lien Intercreditor Agreement shall be reinstated in full force and effect, and such prior termination shall not diminish, release, discharge, impair or otherwise affect the obligations of the parties thereto. The Second Lien Collateral Agent, for itself and on behalf of each Second Lien Secured Party will agree that none of them shall be entitled to benefit from any avoidance action affecting or otherwise relating to any distribution or allocation made in accordance with the Second Lien Intercreditor Agreement, whether by preference or otherwise, it being understood and agreed that the benefit of such avoidance action otherwise allocable to them shall instead be allocated and turned over for application in accordance with the priorities set forth in the Second Lien Intercreditor Agreement.

The Second Lien Intercreditor Agreement will provide that so long as the Discharge of First Lien Obligations has not occurred, whether or not any insolvency or liquidation proceeding has been commenced by or against the Issuer or any Guarantor, (i) neither the Second Lien Collateral Agent nor any Second Lien Secured Party will (x) exercise or seek to exercise any rights or remedies (including setoff or recoupment) with respect to any collateral securing both the First Lien Obligations and any Second Lien Obligations, or institute any action or proceeding with respect to such rights or remedies (including any action of foreclosure), (y) contest, protest or object to any foreclosure proceeding or action brought with respect to the Collateral or any other collateral by the Controlling Collateral Agent or any First Lien Secured Party in respect of the First Lien Obligations, the exercise of any right by the Controlling Collateral Agent or any First Lien Secured Party (or any agent or sub-agent on their behalf) in respect of the First Lien Obligations under any lockbox agreement, control agreement, landlord waiver or bailee's letter or similar agreement or arrangement to which the Controlling Collateral Agent or any First Lien Secured Party either is a party or may have rights as a third-party beneficiary, or any other exercise by any such party of any rights and remedies relating to such collateral or any other collateral under the First Lien Security Documents or otherwise in respect of First Lien Obligations, or (z) object to any forbearance by the First Lien Secured Parties from bringing or pursuing any foreclosure proceeding or action or any other exercise of any rights or remedies relating to such collateral or any other collateral in respect of First Lien Obligations and (ii) except as otherwise provided in the Second Lien Intercreditor Agreement, the Controlling Collateral Agent and the First Lien Secured Parties shall have the exclusive right to enforce rights, exercise remedies (including setoff, recoupment, and the right to credit bid their debt), and make determinations regarding the release, disposition or restrictions with respect to such collateral without any consultation with or the consent of the Second Lien Collateral Agent or any Second Lien Secured Party; *provided*, *however*, that (a) in any insolvency or liquidation proceeding, any Second Lien Representative may file a claim, proof of claim or statement of interest with respect to the Second Lien Obligations in a manner consistent with the terms of the Second Lien Intercreditor Agreement, (b) any Second Lien Representative may take any action (not adverse to the prior Liens on the Collateral securing the First Lien Obligations or the rights of the Controlling Collateral Agent or the First Lien Secured Parties to exercise remedies in respect thereof) in order to create, prove, perfect, preserve or protect (but not enforce) its rights in, and perfection and priority of its Lien on, the Collateral, (c) to the extent not otherwise inconsistent with or prohibited by the Second Lien Intercreditor Agreement, any Second Lien Representative and the Second Lien Secured Parties may exercise their rights and remedies as unsecured creditors, as provided in the Second Lien Intercreditor Agreement,

(d) any Second Lien Representative may exercise the rights and remedies provided for in the Second Lien Intercreditor Agreement with respect to seeking adequate protection in an insolvency or liquidation proceeding, and (e) any Second Lien Representative and the Second Lien Secured Parties may file any necessary or appropriate responsive or defensive pleadings in opposition to any motion, claim, adversary proceeding or other pleading made by any person objecting to or otherwise seeking the disallowance of the claims or Liens of the Second Lien Secured Parties, including any claims secured by the Collateral, in each case in accordance with the terms of the Second Lien Intercreditor Agreement. In exercising rights and remedies with respect to any collateral securing both the First Lien Obligations and any Second Lien Obligations, the Controlling Collateral Agent and the First Lien Secured Parties may enforce the provisions of the First Lien Documents and exercise remedies thereunder, all in such order and in such manner as they may determine in the exercise of their sole discretion. Such exercise and enforcement shall include the rights of an agent appointed by them to sell or otherwise dispose of Collateral upon foreclosure, to incur expenses in connection with such sale or disposition and to exercise all the rights and remedies of a secured lender under the Uniform Commercial Code of any applicable jurisdiction and of a secured creditor under bankruptcy laws of any applicable jurisdiction.

In the event of a sale, transfer or other disposition of any specified item of Collateral (including all or substantially all of the equity interests of any subsidiary of the Company), the Liens granted to the Second Lien Representatives and the Second Lien Secured Parties upon such Collateral to secure Second Lien Obligations shall terminate and be released, automatically and without any further action, concurrently with the termination and release of all Liens granted upon such Collateral to secure First Lien Obligations.

Certain Matters in Connection with Liquidation and Insolvency Proceedings

Debtor-in-Possession Financings

The Second Lien Collateral Agent and each other Second Lien Secured Party will agree, among other things, that if the Issuer or any Guarantor is subject to any insolvency or liquidation proceeding and the Controlling Collateral Agent or any other First Lien Secured Party desires to permit (or not object to) the use of cash collateral or to permit the Issuer or any Guarantor to obtain DIP Financing to be secured by any collateral securing both the First Lien Obligations and any Second Lien Obligations, then each Second Lien Representative, on behalf of itself and each applicable Second Lien Secured Party, will not object to such use of cash collateral or DIP Financing and will not request adequate protection or any other relief in connection therewith (except to the extent permitted by the Second Lien Intercreditor Agreement) and, to the extent the Liens securing the First Lien Obligations are subordinated to or pari passu with such DIP Financing, will subordinate its Liens in the Collateral and any other collateral to such DIP Financing (and all Obligations relating thereto), any adequate protection liens granted to the First Lien Secured Parties, and any "carve out" for professional and United States Trustee fees agreed to by the Controlling Collateral Agent, on the same basis as they are subordinated to the First Lien Obligations pursuant to the Second Lien Intercreditor Agreement. The Second Lien Collateral Agent, for itself and on behalf of each Second Lien Secured Party, will agree that notice received two Business Days prior to the entry of an order approving such usage of cash or other collateral or approving such DIP Financing shall be adequate notice.

Relief from Automatic Stay; Bankruptcy Sales; and Post-Petition Interest

No Second Lien Secured Party may (x) seek relief from the automatic stay with respect to any Collateral without the prior written consent of the Controlling Collateral Agent, or object to any motion for relief from the automatic stay with respect to the Collateral made by the Controlling Collateral Agent, (y) object to any lawful exercise by any holder of First Lien Obligations of the right to credit bid such claims under Section 363(k) of the Bankruptcy Code or any other similar provision of the Bankruptcy Code or other applicable bankruptcy law, or to any sale or other disposition of any Collateral that the Controlling Collateral Agent has consented to, provided that in the case of such a sale, the parties' respective liens will attach to the proceeds of such sale on the same basis of priority as such liens existed on the Collateral pursuant to the Second Lien Intercreditor Agreement, or (z) object to any claim of any holder of First Lien Obligations for post-petition interest, fees, costs, expenses, and/or other charges under Section 506(b) of the Bankruptcy Code or otherwise (for this purpose ignoring all claims and Liens held by the Second Lien Secured Parties on the Collateral).

Adequate Protection

Each Second Lien Representative, for itself and on behalf of each applicable Second Lien Secured Party, will agree that none of them shall object to (a) any request by the Controlling Collateral Agent or the First Lien Secured Parties for adequate protection in any form, (b) any objection by the Controlling Collateral Agent or the First Lien Secured Parties to any motion, relief, action, or proceeding based on the Controlling Collateral Agent's or the First Lien Secured Parties' claiming a lack of adequate protection, or (c) the allowance and/or payment of interest, fees, expenses, or other amounts of the Controlling Collateral Agent or the First Lien Secured Parties as adequate protection or otherwise under Section 506(b) or 506(c) of the Bankruptcy Code or any similar provision of any other bankruptcy law. If the First Lien Secured Parties (or any subset thereof) are granted adequate protection in the form of a Lien on additional or replacement collateral and/or a superpriority administrative expense claim in connection with any DIP Financing or use of cash collateral under Section 363 or 364 of the Bankruptcy Code or any similar provision of any other bankruptcy law, then each Second Lien Representative, for itself and on behalf of the applicable Second Lien Secured Parties, may seek or request adequate protection in the form of (as applicable) a Lien on such additional or replacement collateral and/or a superpriority administrative expense claim, which Lien and/or superpriority administrative expense claim (as applicable) will be subordinated to the Liens securing and providing adequate protection for, and claims with respect to the First Lien Obligations and such DIP Financing (and all obligations relating thereto) on the same basis as the other Liens securing and claims with respect to the Second Lien Obligations are so subordinated to the Liens securing and claims with respect to the First Lien Obligations under the Second Lien Intercreditor Agreement and (ii) in the event any Second Lien Representatives, for themselves and on behalf of the applicable Second Lien Secured Parties, seek or request adequate protection and such adequate protection is granted in the form of (as applicable) a Lien on additional or replacement collateral and/or a superpriority administrative expense claim, then such Second Lien Representatives, for themselves and on behalf of the applicable Second Lien Secured Parties, agree that the First Lien Representatives shall also be granted (as applicable) a senior Lien on such additional or replacement collateral as security and adequate protection for the First Lien Obligations and/or a senior superpriority administrative expense claim, and that any Lien on such additional or replacement collateral securing or providing adequate protection for the Second Lien Obligations and/or superpriority administrative expense claim shall be subordinated to the Liens on such collateral securing and claims with respect to the First Lien Obligations and any such DIP Financing (and all obligations relating thereto) and any other Liens and claims granted to the First Lien Secured Parties as adequate protection on the same basis as the other Liens securing and claims with respect to the Second Lien Obligations are so subordinated to such Liens securing and claims with respect to First Lien Obligations under the Second Lien Intercreditor Agreement. To the extent that the First Lien Secured Parties are granted adequate protection in the form of payments in the amount of current post-petition fees and expenses, and/or other cash payments, then the Second Lien Representatives shall not be prohibited from seeking adequate protection in the form of payments in the amount of current post-petition incurred fees and expenses, and/or other cash payments (as applicable), subject to the right of the First Lien Secured Parties to object to the reasonableness of the amounts of fees and expenses or other cash payments so sought by the Second Lien Secured Parties.

Plans of Reorganization

No Second Lien Representative or any other Second Lien Secured Party (whether in the capacity of a secured or unsecured creditor) may directly or indirectly propose, support or vote in favor of any plan of reorganization or similar dispositive restructuring plan (and each shall be deemed to have voted to reject any such plan) that is inconsistent with or in violation of the terms of the Second Lien Intercreditor Agreement. Without limiting the generality of the foregoing, no Second Lien Representative or any other Second Lien Secured Party (whether in the capacity of a secured or unsecured creditor) may propose, support or vote in favor of any plan of reorganization or similar dispositive restructuring plan unless such plan (a) pays off, in cash in full, all First Lien Obligations or (b) is accepted by the class of holders of First Lien Obligations voting thereon in accordance with Section 1126(c) of the Bankruptcy Code.

Each Second Lien Representative, for itself and on behalf of each applicable Second Lien Secured Party, will acknowledge and agree that (a) the grants of Liens securing the First Lien Obligations and the Second Lien Obligations constitute separate and distinct grants of Liens and (b) because of, among other things, their differing rights in the Collateral, the Second Lien Obligations are fundamentally different from the First Lien Obligations and must be separately classified in any plan of reorganization or similar dispositive restructuring plan proposed,

confirmed or adopted in any insolvency or liquidation proceeding. To further effectuate the intent of the parties as provided in the immediately preceding sentence, if it is held that the claims of the First Lien Secured Parties and the Second Lien Secured Parties in respect of the Collateral constitute only one secured claim (rather than separate classes of senior and junior secured claims) under a plan of reorganization or similar dispositive restructuring plan, then each Second Lien Representative, for itself and on behalf of the applicable Second Lien Secured Parties, will acknowledge and agree that all distributions from the Collateral shall be made as if there were separate classes of senior and junior secured claims against the Issuer and the Guarantors in respect of the Collateral (with the effect being that, to the extent that the aggregate value of the Collateral is sufficient (for this purpose ignoring all claims held by the Second Lien Secured Parties), the First Lien Secured Parties shall be entitled to receive, in addition to amounts distributed to them in respect of principal, pre-petition interest and other claims, all amounts owing in respect of post-petition interest, fees, and expenses (whether or not allowed or allowable in such insolvency or liquidation proceeding) before any distribution is made from the Collateral in respect of the Second Lien Obligations, with each Second Lien Representative, for itself and on behalf of each applicable Second Lien Secured Party, acknowledging and agreeing to turn over to the Controlling Collateral Agent amounts otherwise received or receivable by them from the Collateral to the extent necessary to effectuate the intent of this sentence, even if such turnover has the effect of reducing the claim or recovery of the Second Lien Secured Parties.

Release of Collateral

The Issuer and the Guarantors will be entitled to the release of property and other assets constituting Collateral from the Liens securing the Notes and the First Lien Notes Obligations under any one or more of the following circumstances:

(1) to enable us to consummate the sale, transfer or other disposition (including by the termination of capital leases or the repossession of the leased property in a capital lease by the lessor) of such property or assets (to a Person that is not the Issuer or a Subsidiary of the Issuer) to the extent consummated in accordance with the covenant described under "Repurchase at the Option of Holders—Asset Sales;"

(2) in the case of a Guarantor that is released from its Guarantee with respect to the Notes pursuant to the terms of the Indenture, the release of the property and assets of such Guarantor;

(3) upon the occurrence of a Covenant Suspension Event.

(4) the release of Excess Proceeds or Collateral Excess Proceeds that remain unexpended after the conclusion of an Asset Sale Offer or a Collateral Asset Sale Offer conducted in accordance with the Indenture;

(5) with respect to Collateral that is Capital Stock, upon (i) the dissolution or liquidation of the issuer of that Capital Stock that is not prohibited by the Indenture or (ii) the designation by the Issuer of such issuer of Capital Stock as an Unrestricted Subsidiary under the Indenture;

(6) with respect to any Collateral that becomes an "Excluded Asset," upon it becoming an Excluded Asset;

(7) in accordance with the second paragraph under "Certain Covenants—Liens";

(8) to the extent the Liens on the Collateral securing the Senior Credit Facility Obligations are released by the Bank Collateral Agent (other than any release by, or as a result of, payment of the Senior Credit Facility Obligations), upon the release of such Liens;

(9) in connection with any enforcement action taken by the Controlling Collateral Agent in accordance with the terms of the First Lien Intercreditor Agreement; or

(10) as described under "Amendment, Supplement and Waiver" below.

The Liens on the Collateral securing the Notes and the Guarantees also will be released (i) upon payment in full of the principal of, together with accrued and unpaid interest on, the Notes and all other Obligations under the Indenture, the Guarantees and the Security Documents that are due and payable at or prior to the time such principal, together with accrued and unpaid interest, are paid, (ii) upon a legal defeasance or covenant defeasance under the Indenture as described below under "Legal Defeasance and Covenant Defeasance" or a discharge of the Indenture as described under "Satisfaction and Discharge" or (iii) pursuant to the First Lien Intercreditor Agreement described above.

Notwithstanding clause (3) above, if, after any Covenant Suspension Event, a Reversion Date shall occur, then the Suspension Period with respect to such Covenant Suspension Event shall automatically terminate and all Collateral and Security Documents shall be reinstated and all actions reasonably necessary to provide to the Notes Collateral Agent for its benefit and the benefit of the Trustee and the Holders of the Notes valid, perfected, first priority security interests (subject to Permitted Liens) in the Collateral shall be taken by the Issuer within ninety (90) days after such Reversion Date.

Sufficiency of Collateral

The fair market value of the Collateral is subject to fluctuations based on factors that include, among others, the ability to sell the Collateral in an orderly sale, general economic conditions, the availability of buyers and similar factors. The amount to be received upon a sale of the Collateral would also be dependent on numerous factors, including, but not limited to, the actual fair market value of the Collateral at such time and the timing and the manner of the sale. By their nature, portions of the Collateral may be illiquid and may have no readily ascertainable market value. Accordingly, there can be no assurance that the Collateral can be sold in a short period of time or in an orderly manner. In addition, as discussed further below, the Holders of the Notes will not be entitled to receive post-petition interest or applicable fees, costs, expenses, or charges to the extent the amount of the obligations due under the Notes exceeds the value of the Collateral (after taking into account all other first-priority debt that is also secured by the Collateral), or any "adequate protection" on account of any undersecured portion of the Notes.

Certain Bankruptcy Limitations

The right of the Trustee to foreclose upon, repossess and dispose of the Collateral upon the occurrence of an Event of Default would be significantly impaired by any bankruptcy law in the event that any bankruptcy case or other insolvency or liquidation proceeding were to be commenced by or against the Issuer or any Guarantor prior to the Trustee's having repossessed and disposed of the Collateral. Upon the commencement of a case for relief under the U.S. Bankruptcy Code, a secured creditor such as the Trustee is prohibited from foreclosing upon or repossessing its security from a debtor in a bankruptcy case, or from disposing of previously repossessed security without prior bankruptcy court approval (which may not be given under the circumstances).

In view of the broad equitable powers of a U.S. bankruptcy court and the lack of a precise definition of the meaning of "adequate protection," it is impossible to predict whether or when payments under the Notes could be made following the commencement of a bankruptcy case (or the length of the delay in making any such payments), whether or when the Trustee could or would repossess or dispose of the Collateral, the value of the Collateral at any time during a bankruptcy case or whether or to what extent Holders of the Notes would be compensated for any delay in payment or loss of value of the Collateral. The U.S. Bankruptcy Code permits the payment and/or accrual of post-petition interest, expenses, costs and attorneys' fees to a secured creditor during a debtor's bankruptcy case only to the extent the value of such creditor's interest in the Collateral is determined by the bankruptcy court to exceed the outstanding aggregate principal amount of the obligations secured by the Collateral.

Furthermore, in the event a domestic or foreign bankruptcy court determines that the value of the Collateral is not sufficient to repay all amounts due on the Notes, the Holders of the Notes would hold secured claims only to the extent of the value of the Collateral to which the Holders of the Notes are entitled, and unsecured claims with respect to such shortfall.

Mandatory Redemption; Offers to Purchase; Open Market Purchases

The Issuer will not be required to make any mandatory redemption or sinking fund payments with respect to the Notes. However, under certain circumstances, the Issuer may be required to offer to purchase Notes as described under the caption "—Repurchase at the Option of Holders." The Issuer, the Investors and their respective Affiliates may, at their discretion, at any time and from time to time, acquire Notes by means other than a redemption, whether by tender offer, open market purchases, negotiated transactions or otherwise.

Redemption of Notes for Tax Reasons

The Issuer may redeem the Notes in whole, but not in part, at any time upon giving not less than 30 days' prior notice to the Holders of such Notes (which notice will be irrevocable) at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest, if any, to but not including the date fixed for redemption (a "*Tax Redemption Date*") (subject to the rights of Holders of record on the relevant record date to receive interest due on the relevant interest payment date) and all Additional Amounts (as defined below under "—Payment of Additional Amounts on the Notes"), if any, then due and which will become due on the Tax Redemption Date as a result of the redemption or otherwise, if the Issuer determines in good faith that, as a result of:

(1) any change in, or amendment to, the law or treaties (or any regulations or rulings promulgated thereunder) of a Relevant Taxing Jurisdiction (as defined below); or

(2) any amendment to, or change in an official written application, administration or interpretation of such laws, treaties, regulations or rulings (including a holding, judgment or order by a court of competent jurisdiction or a change in published practice or revenue guidance) (each of the foregoing in clauses (1) and (2), a "*Change in Tax Law*"),

a Payor (as defined below) is, or on the next interest payment date in respect of such Notes would be, required to pay Additional Amounts with respect to such Notes, and such obligation cannot be avoided by taking reasonable measures available to the Payor (including, for the avoidance of doubt, the appointment of a new paying agent and, in the case of a Guarantor, only if the payment giving rise to such requirement cannot be made by the Issuer or a Guarantor who can make such payment without the obligation to pay Additional Amounts, in either case, where this would be reasonable, but not including assignment of the obligation to make payment with respect to such Notes). Such Change in Tax Law must (i) not have been publicly announced before the Issue Date and (ii) become effective on or after the Issue Date (or if the applicable Relevant Tax Jurisdiction became a Relevant Tax Jurisdiction on a date after the Issue Date, such later date). The foregoing provisions shall apply (a) to a Guarantor only after such time as such Guarantor is obligated to make at least one payment on such Notes and (b) *mutatis mutandis* to any successor Person, after such successor Person becomes a party to the Indenture, with respect to a change or amendments occurring after the time such successor Person becomes a party to the Indenture.

Notice of redemption for taxation reasons will be published in accordance with the procedures described under "—Selection and Notice." Notwithstanding the foregoing, no such notice of redemption will be given earlier than 60 days prior to the earliest date on which the Payor would be obligated to make such payment of Additional Amounts. Prior to the publication or mailing of any notice of redemption of any Notes pursuant to the foregoing, the Issuer will deliver to the Trustee (a) an Officer's Certificate stating that it is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to its right so to redeem have been satisfied and (b) an opinion of an independent tax counsel of recognized standing qualified under the laws of the Relevant Tax Jurisdiction to the effect that the Payor has been or will become obligated to pay Additional Amounts as a result of a Change in Tax Law. The Trustee will accept and shall be entitled to rely on such Officer's Certificate and opinion as sufficient evidence of the satisfaction of the conditions precedent described above, without further inquiry, in which event it will be conclusive and binding on the Holders of the Notes.

Payment of Additional Amounts on the Notes

All payments made by or on behalf of the Issuer or any Guarantor (including, in each case, any successor entity) (each, a "*Payor*") in respect of the Notes or with respect to any Guarantee thereof, as applicable, will be

made free and clear of and without withholding or deduction for, or on account of, any Taxes unless the withholding or deduction of such Taxes is then required by law. If any deduction or withholding for, or on account of, any Taxes imposed or levied by or on behalf of:

(1) any jurisdiction from or through which payment on any Note or Guarantee thereof is made, or any political subdivision or governmental authority thereof or therein having the power to tax; or

(2) any other jurisdiction in which a Payor is organized, engaged in business for tax purposes, or otherwise considered to be a resident for tax purposes, or any political subdivision or governmental authority thereof or therein having the power to tax (each of clause (1) and (2), a "*Relevant Taxing Jurisdiction*"),

will at any time be required by law to be made from any payments made by or on behalf of the Payor or the paying agent with respect to any Note or Guarantee thereof, including payments of principal, redemption price, interest or premium, if any, the Payor will pay (together with such payments) such additional amounts (the "*Additional Amounts*") as may be necessary in order that the net amounts received in respect of such payments, after such withholding or deduction (including any such withholding or deduction from such Additional Amounts), will not be less than the amounts which would have been received in respect of such payments on any such Note or Guarantee thereof in the absence of such withholding or deduction; *provided*, *however*, that no such Additional Amounts will be payable for or on account of:

(1) any Taxes that would not have been so imposed but for the existence of any present or former connection between the relevant Holder or beneficial owner of the Note (or between a fiduciary, settlor, beneficiary, member, partner or shareholder of, or possessor of power over the relevant Holder or beneficial owner, if the relevant Holder or beneficial owner is an estate, nominee, trust, partnership, limited liability company or corporation) and the Relevant Taxing Jurisdiction (including, without limitation, being resident for tax purposes, or being a citizen or resident or national of, or carrying on a business or maintaining a permanent establishment in, or being physically present in, the Relevant Taxing Jurisdiction) but excluding, in each case, any connection arising solely from the acquisition, ownership or holding of such Note or the receipt of any payment or the exercise or enforcement of rights under such Note, the Indenture or a Guarantee of such Note;

(2) any Tax that is imposed or withheld by reason of the failure by the Holder or the beneficial owner of the Note to provide an applicable Internal Revenue Service Form W-8 (with any required attachments) or W-9 or to comply with a written request of the Payor addressed to the Holder, after reasonable notice (at least 60 days before any such withholding or deduction would be made), to provide other certification, information, documents or other evidence concerning the nationality, residence or identity of the Holder or such beneficial owner or to make any declaration or similar claim or satisfy any other reporting requirement relating to such matters, which is required by a statute, treaty, regulation or administrative practice of the Relevant Taxing Jurisdiction as a precondition to exemption from all or part of such Tax but, only to the extent the Holder or beneficial owner is legally entitled to provide such certification or documentation;

(3) any Taxes, to the extent that such Taxes were imposed as a result of the presentation of the Note for payment (where presentation is required) more than 30 days after the relevant payment is first made available for payment to the Holder;

(4) any Taxes that are payable otherwise than by deduction or withholding from a payment on or with respect to the Notes or any Guarantee thereof;

(5) any estate, inheritance, gift, sales, transfer, personal property or similar Taxes;

(6) any Taxes imposed in connection with a Note presented for payment by or on behalf of a Holder or beneficial owner who would have been able to avoid such Tax by presenting the Note to, or otherwise accepting payment from, another paying agent in a member state of the European Union;

(7) any Taxes imposed pursuant to Sections 1471 through 1474 of the Code (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or agreements thereunder, official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Code (or any amended or successor version that is substantively comparable), or any law, legislation, rules or practices implementing an intergovernmental agreement relating thereto;

(8) any Taxes imposed as a result of the beneficial owner being or having been (i) a "10-percent shareholder" of the Issuer as defined in Section 871(h)(3) of the Code or any successor provision or (ii) a controlled foreign corporation that is related to the Issuer within the meaning of Section 864(d)(4) of the Code or any successor provision;

(9) any Taxes imposed as a result of the Holder or beneficial owner being a bank receiving payments on an extension of credit made pursuant to a loan agreement entered into in the ordinary course of its trade or business, as described in Section 881(c)(3)(A) of the Code or any successor provision;

(10) any Taxes imposed by reason of the Holder's or beneficial owner's past or present status as a passive foreign investment company, a controlled foreign corporation, a foreign tax-exempt organization or a personal holding company with respect to the United States or as a corporation that accumulates earnings to avoid U.S. federal income tax; or

(11) any combination of the items (1) through (10) above.

In addition, no Additional Amounts shall be paid with respect to a Holder who is a fiduciary or a partnership or limited liability company or any person other than the beneficial owner of the Notes, to the extent that the beneficiary or settlor with respect to such fiduciary, the member of such partnership or limited liability company or the beneficial owner would not have been entitled to Additional Amounts had such beneficiary, settlor, member or beneficial owner held such Notes directly.

The applicable withholding agent will (i) make any required withholding or deduction and (ii) remit the full amount deducted or withheld to the relevant taxing authority in the Relevant Taxing Jurisdiction in accordance with applicable law. The Payor will use all reasonable efforts to obtain certified copies of tax receipts evidencing the payment of any Taxes so deducted or withheld from each Relevant Taxing Jurisdiction imposing such Taxes and will provide such certified copies, or if, notwithstanding the Payor's reasonable efforts to obtain such tax receipts, such tax receipts are not available, other reasonable evidence of such payments as soon as reasonably practicable to the Trustee. Such copies or other evidence shall be made available to the Holders upon reasonable request and will be made available at the offices of the paying agent.

If any Payor is obligated to pay Additional Amounts under or with respect to any payment made on any Note or Guarantee of a Note, at least 30 days prior to the date of such payment, the Payor will deliver to the Trustee an Officer's Certificate stating the fact that Additional Amounts will be payable and the amount estimated to be so payable (unless such obligation to pay Additional Amounts arises less than 45 days prior to the relevant payment date, in which case the Payor may deliver such Officer's Certificate as promptly as practicable after the date that is 30 days prior to the payment date). The Trustee shall be entitled to rely solely, without further inquiry, on such Officer's Certificate as conclusive proof that such payments are necessary.

Wherever in the Indenture, the Notes or this "Description of Notes" there is mentioned, in any context, with respect to the Notes:

(1) the payment of principal;

(2) purchase prices in connection with a purchase of Notes;

(3) interest; or

(4) any other amount payable on or with respect to any Guarantee of a Note,

such reference shall be deemed to include payment of Additional Amounts to the extent that, in such context, Additional Amounts are, were or would be payable in respect thereof.

The Payor will pay and indemnify the Holders and beneficial owners of the Notes for any present or future stamp, transfer, issue, registration, court or documentary taxes, or any other excise, property or similar taxes or similar charges or levies (including any related interest or penalties with respect thereto) that arise in a Relevant Taxing Jurisdiction from the execution, delivery, enforcement or registration of, or receipt of payments with respect to, any Note, any Guarantee of a Note, the Indenture, or any other document or instrument in relation thereto (other than in each case, in connection with a transfer of the Notes after this offering and limited, solely to the extent of such taxes or similar charges or levies that arise from the receipt of any payments of principal or interest on the Notes, to any such taxes or similar charges or levies that are not excluded under clauses (1) through (3) and (5) through (10)).

The foregoing obligations will survive any termination, defeasance or discharge of the Indenture and will apply *mutatis mutandis* to any jurisdiction in which any successor to a Payor is organized, engaged in business for tax purposes or otherwise resident for tax purposes, or any jurisdiction from or through which any payment under, or with respect to the Notes or Guarantees thereof is made by or on behalf of such Payor, or any political subdivision or taxing authority or agency thereof or therein.

Issuance in Euro; Payment on the Notes

Initial Holders of Notes will be required to pay for the Notes in euro, and all payments of principal of, the redemption price (if any), and interest and Additional Amounts (if any), will be payable in euro; *provided* that, if on or after the date of this Offering Circular, the euro is unavailable to the Issuer due to the imposition of exchange controls or other circumstances beyond its control or if the euro is no longer being used by the then member states of the European Monetary Union that have adopted the euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the Notes will be made in U.S. dollars until the euro is again available to the Issuer or so used. The amount payable on any date in euro will be converted into U.S. dollars at the rate mandated by the U.S. Federal Reserve Board as of the close of business on the second Business Day prior to the relevant payment date or, in the event the U.S. Federal Reserve Board has not mandated a rate of conversion, on the basis of the most recent U.S. dollar/euro exchange rate published in The Wall Street Journal on or prior to the second Business Day prior to the relevant payment date. Any payment in respect of the Notes so made in U.S. dollars will not constitute an event of default under the Notes or the Indenture. In no event shall the Trustee or paying agent be responsible for monitoring any exchange rates or effecting any conversions.

Optional Redemption

Except as set forth (i) above under the caption "Redemption of Notes for Tax Reasons," (ii) below or (iii) in the circumstances set forth in the ninth paragraph under "—Repurchase at the Option of Holders—Change of Control," the Issuer will not be entitled to redeem the Notes at its option prior to , 2022.

At any time prior to , 2022, the Issuer may, at its option and on one or more occasions, redeem all or a part of the Notes, upon notice as described under the heading "—Repurchase at the Option of Holders—Selection and Notice," at a redemption price equal to 100% of the principal amount of the Notes redeemed plus the Applicable Premium as of, and accrued and unpaid interest, if any, to, but excluding, the date of redemption (any applicable date of redemption hereunder, the "*Redemption Date*"), subject to the rights of Holders of record on the relevant record date to receive interest due on the relevant interest payment date falling on or prior to the Redemption Date.

On and after , 2022, the Issuer may, at its option and on one or more occasions, redeem the Notes, in whole or in part, upon notice as described under the heading "—Repurchase at the Option of Holders—Selection and Notice," at the redemption prices (expressed as percentages of principal amount of Notes to be

redeemed) set forth below, plus accrued and unpaid interest thereon, if any, to, but excluding, the applicable Redemption Date, subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date falling on or prior to the Redemption Date, if redeemed during the twelve-month period beginning on of each of the years indicated below:

Year	Redemption Price
2022	%
2023	%
2024 and thereafter	100.000%

In addition, until , 2022, the Issuer may, at its option, upon notice as described under the heading "—Repurchase at the Option of Holders—Selection and Notice," on one or more occasions redeem up to 40% of the aggregate principal amount of Notes (including Additional Notes) issued under the Indenture at a redemption price (as calculated by the Issuer) equal to (x) % of the aggregate principal amount thereof, with an amount equal to or less than the net cash proceeds from one or more Equity Offerings to the extent such net cash proceeds are received by or contributed to the Issuer plus (y) accrued and unpaid interest thereon, if any, to, but excluding, the applicable Redemption Date, subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date falling on or prior to the Redemption Date; *provided* that (a) at least 50% of the sum of the aggregate principal amount of Notes being redeemed originally issued under the Indenture on the Issue Date (but excluding any Additional Notes issued under the Indenture after the Issue Date) remains outstanding immediately after the occurrence of each such redemption and (b) each such redemption occurs within 180 days of the date of closing of each such Equity Offering.

The Notes to be redeemed shall be selected in the manner described under "—Repurchase at the Option of Holders—Selection and Notice."

Notwithstanding the foregoing, in connection with any tender offer for the Notes, if Holders of not less than 90% in aggregate principal amount of the outstanding Notes validly tender and do not withdraw such Notes in such tender offer and the Issuer, or any third party making such tender offer in lieu of the Issuer, purchases all of the Notes validly tendered and not withdrawn by such Holders, the Issuer or such third party will have the right upon not less than 10 nor more than 60 days' prior notice, given not more than 60 days following such repurchase date, to redeem (with respect to the Issuer) or repurchase (with respect to a third party) all Notes that remain outstanding following such purchase at a price equal to the price offered to each other Holder in such tender offer (which may be less than par and shall exclude any early tender premium or similar premium and any accrued and unpaid interest paid to any Holder in such tender offer payment) plus, to the extent not included in the tender offer payment, accrued and unpaid interest, if any, thereon, to, but excluding the Redemption Date or purchase date, subject to the right of Holders of record of the Notes on the relevant record date to receive interest due on the relevant interest payment date falling on or prior to the Redemption Date or purchase date.

Repurchase at the Option of Holders

Change of Control

The Indenture will provide that if a Change of Control occurs after the Issue Date, unless, prior to, or concurrently with, the time the Issuer is required to make a Change of Control Offer (as defined below), the Issuer has previously or concurrently mailed or delivered, or otherwise sent through electronic transmission, a redemption notice with respect to all the outstanding Notes as described under "—Optional Redemption" or "—Satisfaction and Discharge," the Issuer will make an offer to purchase all of the Notes pursuant to the offer described below (the "*Change of Control Offer*") at a price in cash equal to 101% of the aggregate principal amount thereof (or such higher amount as the Issuer may determine (any Change of Control Offer at a higher amount, an "*Alternate Offer*")) (such price, the "*Change of Control Payment*") plus accrued and unpaid interest, if any, to, but excluding, the date of purchase, subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date falling on or prior to the Change of Control Payment Date (as defined below). Within 30 days following any Change of Control, the Issuer will send notice of such Change of Control Offer electronically or by

first-class mail, with a copy to the Trustee sent in the same manner, to each Holder to the address of such Holder appearing in the security register or otherwise in accordance with the procedures of Euroclear or Clearstream with the following information:

(1) that a Change of Control Offer is being made pursuant to the covenant entitled "—Repurchase at the Option of Holders—Change of Control," and that all Notes properly tendered pursuant to such Change of Control Offer will be accepted for payment by the Issuer;

(2) the purchase price and the purchase date, which will be no earlier than 10 days nor later than 60 days from the date such notice is sent (the "*Change of Control Payment Date*"); *provided* that the Change of Control Payment Date may be delayed, in the Issuer's discretion, until such time (including more than 60 days after the date such notice is sent) as any or all such conditions referred to in clause (8) below shall be satisfied or waived;

(3) that any Note not properly tendered will remain outstanding and continue to accrue interest;

(4) that, unless the Issuer defaults in the payment of the Change of Control Payment, all Notes accepted for payment pursuant to the Change of Control Offer will cease to accrue interest on the Change of Control Payment Date;

(5) that Holders electing to have any Notes purchased pursuant to a Change of Control Offer will be required to surrender such Notes, with the form entitled "Option of Holder to Elect Purchase" on the reverse of such Notes completed or otherwise in accordance with the procedures of Euroclear or Clearstream to the paying agent specified in the notice at the address specified in the notice prior to the close of business on the third Business Day preceding the Change of Control Payment Date;

(6) that, until the close of business on the tenth Business Day after the date such notice is sent (or such later time and date as the Issuer may decide in its sole discretion) (such time and date, the "*withdrawal deadline*"), that Holders will be entitled to withdraw their tendered Notes and their election to require the Issuer to purchase such Notes; *provided* that the paying agent receives, not later than the withdrawal deadline, an electronic transmission (in PDF), a telegram, a facsimile transmission or letter or otherwise in accordance with the procedures of Euroclear or Clearstream setting forth the name of the Holder, the principal amount of Notes tendered for purchase, and a statement that such Holder is withdrawing its tendered Notes and its election to have such Notes purchased;

(7) that if less than all of such Holder's Notes are tendered for purchase, such Holder will be issued new Notes (or, in the case of global notes, such Notes shall be reduced by such amount of Notes that the Holder has tendered) and such new Notes will be equal in principal amount to the unpurchased portion of the Notes surrendered; *provided* that the unpurchased portion of the Notes must be equal to at least €100,000 or an integral multiple of €1,000 in excess thereof;

(8) if such notice is sent prior to the occurrence of a Change of Control, stating that the Change of Control Offer is conditional on the occurrence of such Change of Control or such other conditions specified therein and describing each such condition, and, if applicable, stating that, in the Issuer's discretion (including more than 60 days after the notice is mailed or delivered), the Change of Control Payment Date may be delayed until such time as any or all such conditions shall be satisfied or waived, or that such purchase may not occur and such notice may be rescinded in the event that the Issuer shall determine that any or all such conditions (including the occurrence of such Change of Control) will not be satisfied or waived by the Change of Control Payment Date, or by the Change of Control Payment Date as so delayed; and

(9) such other instructions, as determined by the Issuer, consistent with this covenant, that a Holder must follow.

While the Notes are in global form and the Issuer makes an offer to purchase all of the Notes pursuant to the Change of Control Offer, a Holder may exercise its option to elect for the purchase of Notes through the facilities of Euroclear or Clearstream, subject to the applicable rules and regulations.

The Issuer will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws or regulations are applicable in connection with the repurchase of Notes pursuant to a Change of Control Offer. To the extent that the provisions of any securities laws or regulations conflict with the provisions of the Indenture, the Issuer will comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations described in the Indenture by virtue thereof.

On the Change of Control Payment Date, the Issuer will, to the extent permitted by law,

(1) accept for payment all Notes issued by it or portions thereof properly tendered pursuant to the Change of Control Offer;

(2) deposit with the applicable paying agent an amount equal to the aggregate Change of Control Payment in respect of all Notes or portions thereof so tendered; and

(3) deliver, or cause to be delivered, to the Trustee for cancellation the Notes so accepted together with an Officer's Certificate to the Trustee stating that such Notes or portions thereof have been tendered to and purchased by the Issuer.

The Senior Credit Facilities provide, and future credit agreements or other agreements relating to Indebtedness to which the Issuer (or one of its Affiliates) becomes a party may provide, that certain change of control events with respect to the Issuer would constitute a default thereunder (including a Change of Control under the Indenture). In addition, the Existing Unsecured Notes contain a change of control provision similar to the provisions described in this "—Change of Control" section. If we experience a change of control event that triggers a default under our Senior Credit Facilities and/or such other agreements or results in a requirement to offer to repurchase the Existing Unsecured Notes, we could seek a waiver of such default or seek to refinance our Senior Credit Facilities, the Existing Unsecured Notes and/or such other agreements. In the event we do not obtain such a waiver or refinance the Senior Credit Facilities, the Existing Unsecured Notes and/or such other agreements, such default or failure to repurchase any tendered Existing Unsecured Notes could result in amounts outstanding under our Senior Credit Facilities, the Existing Unsecured Notes and/or such other agreements being declared due and payable.

Our ability to pay cash to the Holders following the occurrence of a Change of Control may be limited by our then-existing financial resources. Therefore, sufficient funds may not be available when necessary to make any required repurchases of the Notes. See "Risk Factors—Risks Related to our Indebtedness and the Notes—We may not be able to purchase the notes upon a change of control, which would result in a default under the indenture that will govern the notes offered hereby and would materially adversely affect our business and financial condition."

The Change of Control purchase feature of the Notes may in certain circumstances make it more difficult or discourage a sale or takeover of the Issuer or any Parent Entity, and, thus, the removal of incumbent management. The Change of Control purchase feature is a result of negotiations between the initial purchasers and us. We currently have no intention to engage in a transaction involving a Change of Control, although it is possible that we could decide to do so in the future. Subject to the limitations discussed below, we could, in the future, enter into certain transactions, including acquisitions, refinancings or other recapitalizations, that would not constitute a Change of Control under the Indenture, but that could increase the amount of Indebtedness outstanding at such time or otherwise affect our capital structure or credit ratings. Restrictions on our ability to incur additional Indebtedness are contained in the covenants described under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" and "Certain Covenants—Liens." Such restrictions in the Indenture can be waived only with the consent of the Holders of a majority in aggregate principal amount of the Notes then outstanding. Except for the limitations contained in such covenants, however, the Indenture will not contain any covenants or provisions that may afford Holders protection in the event of a highly leveraged transaction.

The Issuer will not be required to make a Change of Control Offer if a third party approved in writing by the Issuer makes the Change of Control Offer (including, for the avoidance of doubt, an Alternate Offer) in the manner, at the times and otherwise in compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer. Notwithstanding anything to the contrary herein, a Change of Control Offer (including, for the avoidance of doubt, an Alternate Offer) may be made in advance of a Change of Control, conditional upon such Change of Control or such other conditions specified therein, if a definitive agreement is in place for the Change of Control at the time of the making of such Change of Control Offer.

If Holders of not less than 90% in aggregate principal amount of the outstanding Notes validly tender and do not withdraw such Notes in a Change of Control Offer and the Issuer, or any third party approved in writing by the Issuer making a Change of Control Offer in lieu of the Issuer as described above, purchases all of the Notes validly tendered and not withdrawn by such Holders, the Issuer or such third party will have the right, upon not less than 10 nor more than 60 days' prior notice, *provided* that such notice is given not more than 60 days following such purchase pursuant to the Change of Control Offer described above, to redeem (with respect to the Issuer) or purchase (with respect to a third party) all Notes that remain outstanding following such purchase on a date (the "*Second Change of Control Payment Date*") at a price in cash equal to the applicable Change of Control Payment (excluding any early tender premium or similar premium and any accrued and unpaid interest to any Holder in such Change of Control Payment) in respect of the Second Change of Control Payment Date, including, to the extent not included in the Change of Control Payment, accrued and unpaid interest, if any, thereon, to, but excluding, the Second Change of Control Payment Date, subject to the right of Holders of record of Notes on the relevant record date to receive interest due on the relevant interest payment date falling on or prior to the Second Change of Control Payment Date.

The definition of "*Change of Control*" includes a disposition of all or substantially all of the assets of the Issuer and its Subsidiaries, taken as a whole, to any Person, other than a Permitted Holder. Although there is a limited body of case law interpreting the phrase "substantially all," there is no precise established definition of the phrase under applicable law. Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve a disposition of "all or substantially all" of the assets of the Issuer. As a result, it may be unclear as to whether a *Change of Control* has occurred and whether a Holder may require the Issuer to make an offer to repurchase the Notes as described above.

The provisions of the Indenture relating to the Issuer's obligation to make a Change of Control Offer with respect to the Notes upon a Change of Control, including the definition of "*Change of Control*," may be waived or modified at any time with the written consent of the Holders of a majority in aggregate principal amount of the Notes then outstanding. A Change of Control Offer with respect to the Notes (including, for the avoidance of doubt, an Alternate Offer) may be made at the same time as consents are solicited with respect to an amendment, supplement or waiver of the Indenture, the Notes and/or the Guarantees so long as the offer to purchase a Holder's Notes in the tender offer is not conditioned upon the delivery of consents by such Holder. In addition, the Issuer or any third party approved in writing by the Issuer that is making the Change of Control Offer (including, for the avoidance of doubt, an Alternate Offer) may increase or decrease the Change of Control Payment (or decline to pay any early tender premium or similar premium) being offered to Holders at any time in its sole discretion, so long as the Change of Control Payment is at least equal to 101% of the aggregate principal amount of the Notes being repurchased, plus accrued and unpaid interest thereon.

Asset Sales

The Indenture will provide that the Issuer will not, and will not permit any of its Restricted Subsidiaries to, consummate, directly or indirectly, an Asset Sale unless:

(1) the Issuer or such Restricted Subsidiary, as the case may be, receives consideration at the time of such Asset Sale at least equal to the fair market value (measured at the time of contractually agreeing to such Asset Sale) of the assets sold or otherwise disposed of; and

(2) except in the case of a Permitted Asset Swap, at least 75% of the consideration for such Asset Sale (measured at the time of contractually agreeing to such Asset Sale), together with all other Asset

Sales since November 21, 2017 (on a cumulative basis), received by the Issuer or such Restricted Subsidiary, as the case may be, is in the form of cash or Cash Equivalents; *provided* that the amount of:

(i) the greater of the principal amount and the carrying value of any liabilities (as reflected on the Issuer's or such Restricted Subsidiary's most recent consolidated balance sheet or in the footnotes thereto, or if incurred, accrued or increased subsequent to the date of such balance sheet, such liabilities that would have been reflected on the Issuer's or such Restricted Subsidiary's consolidated balance sheet or in the footnotes thereto if such incurrence, accrual or increase had taken place on or prior to the date of such balance sheet, as determined in good faith by the Issuer) of the Issuer or any Restricted Subsidiary, other than liabilities that are by their terms subordinated to the Notes or the Guarantees, that are assumed by the transferee of any such assets (or are otherwise extinguished in connection with the transactions relating to such Asset Sale) pursuant to a written agreement which releases the Issuer or such Restricted Subsidiary from such liabilities;

(ii) any securities, notes or other obligations or assets received by the Issuer or such Restricted Subsidiary from such transferee that are converted by the Issuer or such Restricted Subsidiary into cash or Cash Equivalents, or by their terms are required to be satisfied for cash or Cash Equivalents (to the extent of the cash or Cash Equivalents received), in each case, within 180 days following the closing of such Asset Sale; and

(iii) any Designated Non-cash Consideration received by the Issuer or such Restricted Subsidiary in such Asset Sale having an aggregate fair market value (with the fair market value of such item of Designated Non-cash Consideration being measured at the time of contractually agreeing to the related Asset Sale), taken together with all other Designated Non-cash Consideration received pursuant to this clause (iii) that is at that time outstanding, not to exceed 2.0% of the Total Assets at the time of contractually agreeing to such Asset Sale,

shall, for purposes of the paragraphs under this caption "Repurchase at the Option of Holders—Asset Sales" (and no other provision of the Indenture), be deemed to be cash or Cash Equivalents.

Within 450 days after the receipt of any Net Proceeds from any Asset Sale (the "*Asset Sale Proceeds Application Period*"), the Issuer or such Restricted Subsidiary, at its option, may apply an amount equal to the Applicable Percentage of the Net Proceeds from such Asset Sale (the "*Applicable Proceeds*"),

(i) to the extent such Net Proceeds are from an Asset Sale of Collateral, to repay (a) Obligations under the Notes or (b) First Lien Obligations (other than the Notes), and in the case of revolving obligations (other than Obligations in respect of any asset-backed credit facility), to correspondingly reduce commitments with respect thereto; *provided* that in the case of any repayment pursuant to clause (b), the Issuer or such Restricted Subsidiary will either (1) reduce Obligations under the Notes on an equal or ratable basis with any First Lien Obligations repaid pursuant to clause (b) by, at its option (A) redeeming Notes as described under "Optional Redemption" or (B) purchasing Notes through open-market purchases or in arm's length privately negotiated transactions (which, in each case, may be below par) or (2) make an offer (in accordance with the procedures set forth below for an Asset Sale Offer) to all Holders to purchase their Notes for no less than 100% of the principal amount thereof, plus the amount of accrued but unpaid interest, if any, thereon) up to the principal amount of Notes to be repurchased (which offer shall be deemed to be a Collateral Asset Sale Offer for purposes hereof);

(ii) if the assets that are the subject of such Asset Sale do not constitute Collateral, to repay:

(w) Obligations under a Credit Facility to the extent such Obligations were incurred under clause (1) of the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," (and in the case of revolving obligations, to correspondingly reduce commitments with respect thereto);

(x) Obligations under Secured Indebtedness of the Issuer or a Guarantor (and in the case of revolving obligations, to correspondingly reduce commitments with respect thereto);

(y) Obligations under the Notes or any other Indebtedness (other than Subordinated Indebtedness) of the Issuer or any Restricted Subsidiary (and, in the case of other Senior Indebtedness, to correspondingly reduce any outstanding commitments with respect thereto, if applicable); *provided* that if the Issuer or any Restricted Subsidiary shall so repay any Senior Indebtedness other than the Notes, the Issuer will either (1) reduce Obligations under the Notes on a pro rata basis by, at its option, (A) redeeming Notes as described under "—Optional Redemption" or (B) purchasing Notes through open-market purchases or in arm's-length privately negotiated transactions (which, in each case, may be below par), or (2) make an offer (in accordance with the procedures set forth below for an Asset Sale Offer) to all Holders to purchase their Notes on a ratable basis with such other Senior Indebtedness for no less than 100% of the principal amount thereof, plus the amount of accrued but unpaid interest, if any, thereon up to the principal amount of Notes to be repurchased (which offer shall be deemed to be an Asset Sale Offer for purposes hereof); or

(z) Indebtedness of a Restricted Subsidiary that is not a Subsidiary Guarantor, other than Indebtedness owed to the Issuer or another Restricted Subsidiary;

(iii) to make (a) an Investment in any one or more businesses; *provided* that such Investment in any business is in the form of the acquisition of Capital Stock and results in the Issuer or a Restricted Subsidiary, as the case may be, owning an amount of the Capital Stock of such business such that it constitutes or continues to constitute a Restricted Subsidiary, (b) capital expenditures or (c) acquisitions of other property or assets (other than Capital Stock), in the case of each of clauses (a), (b) and (c), either (A) that is used or useful in a Similar Business or (B) that replace the businesses, properties and/or assets that are the subject of such Asset Sale; or

(iv) any combination of the foregoing;

provided that, in the case of clause (iii) above, a binding commitment or letter of intent shall be treated as a permitted application of the Applicable Proceeds from the date of such commitment or letter of intent so long as the Issuer or such Restricted Subsidiary enters into such commitment or letter of intent with the good faith expectation that such Applicable Proceeds will be applied to satisfy such commitment or letter of intent within 180 days of the expiration of the Asset Sale Proceeds Application Period (an "*Acceptable Commitment*") and such Applicable Proceeds are actually applied in such manner within 180 days of the expiration of the Asset Sale Proceeds Application Period (the period from the consummation of the Asset Sale to such date, the "*First Commitment Application Period*"), and, in the event any Acceptable Commitment is later cancelled or terminated for any reason after the expiration of the Asset Sale Proceeds Application Period and before the Applicable Proceeds are applied in connection therewith, then such Applicable Proceeds shall constitute Excess Proceeds unless the Issuer or such Restricted Subsidiary reasonably expects to enter into another Acceptable Commitment prior to the expiration of the First Commitment Application Period (a "*Second Commitment*") and such Applicable Proceeds are actually applied in such manner prior to 180 days from the expiration of the First Commitment Application Period (the period from the consummation of the Asset Sale to such date, the "*Second Commitment Application Period*"); *provided*, *further*, that if any Second Commitment is later cancelled or terminated for any reason before such Applicable Proceeds are applied or if such Second Commitment is not entered into prior to the expiration of the First Commitment Application Period, then such Applicable Proceeds shall constitute Excess Proceeds to the extent the Second Commitment Application Period has expired.

To the extent Applicable Proceeds from an Asset Sale of Collateral exceed amounts that are invested or applied as provided and within the time period set forth in the preceding paragraph, such excess amount will be deemed to constitute "*Collateral Excess Proceeds*." When the aggregate amount of Collateral Excess Proceeds exceeds $150.0 million (the "*Collateral Excess Proceeds Threshold*"), the Issuer shall make an offer to all Holders and, if required or permitted by the terms of other First Lien Obligations or Obligations secured by a Lien permitted

under the Indenture on the assets disposed of (which Lien is not subordinate to the Lien of the Notes with respect to the Collateral), to the holders of such other First Lien Obligations or such other Obligations (a "*Collateral Asset Sale Offer*"), to purchase the maximum aggregate principal amount (or accreted value, as applicable) of the Notes and such other First Lien Obligations or such other Obligations, with respect to the Notes only, that is equal to €1,000 or an integral multiple of €1,000 in excess thereof, that may be purchased out of the Collateral Excess Proceeds at an offer price, with respect to the Notes only, in cash in an amount equal to 100% of the principal amount thereof (or accreted value thereof, if less), plus accrued and unpaid interest, if any, to, but excluding, the date fixed for the closing of such offer, in accordance with the procedures set forth in the Indenture and, if applicable, the other documents governing such other First Lien Obligations or such other Obligations. The Issuer will commence a Collateral Asset Sale Offer with respect to Collateral Excess Proceeds within twenty Business Days after the date that Collateral Excess Proceeds exceed the Collateral Excess Proceeds Threshold by transmitting electronically or mailing the notice required pursuant to the terms of the Indenture, with a copy to the Trustee. The Issuer may satisfy the foregoing obligation with respect to such Applicable Proceeds from an Asset Sale by making a Collateral Asset Sale Offer prior to the expiration of the Asset Sale Proceeds Application Period (the "*Collateral Advance Offer*") with respect to all or a part of the available Applicable Proceeds (the "*Collateral Advance Portion*") in advance of being required to do so by the Indenture.

To the extent Applicable Proceeds from an Asset Sale of non-Collateral exceed amounts that are invested or applied as provided and within the time period set forth in the preceding paragraph, such excess amount will be deemed to constitute "*Excess Proceeds*." When the aggregate amount of Excess Proceeds exceeds $150.0 million (the "*Excess Proceeds Threshold*"), the Issuer shall make an offer to all Holders and, if required or permitted by the terms of any other Indebtedness that is pari passu in right of payment with the Notes ("*Pari Passu Indebtedness*"), to the holders of such Pari Passu Indebtedness (an "*Asset Sale Offer*"), to purchase the maximum aggregate principal amount (or accreted value, as applicable) of the Notes and such Pari Passu Indebtedness, with respect to the Notes only, that is equal to €1,000 or an integral multiple of €1,000 in excess thereof, that may be purchased out of the Excess Proceeds at an offer price, with respect to the Notes only, in cash in an amount equal to 100% of the principal amount thereof (or accreted value thereof, if less), plus accrued and unpaid interest, if any, to, but excluding, the date fixed for the closing of such offer, in accordance with the procedures set forth in the Indenture and, if applicable, the other documents governing the applicable Pari Passu Indebtedness. The Issuer will commence an Asset Sale Offer with respect to Excess Proceeds within twenty Business Days after the date that Excess Proceeds exceed the Excess Proceeds Threshold by transmitting electronically or mailing the notice required pursuant to the terms of the Indenture, with a copy to the Trustee. The Issuer may satisfy the foregoing obligation with respect to such Applicable Proceeds from an Asset Sale by making an Asset Sale Offer prior to the expiration of the Asset Sale Proceeds Application Period (the "*Advance Offer*") with respect to all or a part of the available Applicable Proceeds (the "*Advance Portion*") in advance of being required to do so by the Indenture.

To the extent that the aggregate principal amount (or accreted value, as applicable) of Notes and such other First Lien Obligations or Obligations secured by a Lien permitted under the Indenture (which Lien is not subordinate to the Lien of the Notes with respect to the Collateral) tendered pursuant to a Collateral Asset Sale Offer is less than the Collateral Excess Proceeds (or, in the case of a Collateral Advance Offer, the Collateral Advance Portion), the Issuer may use any remaining Excess Proceeds (or, in the case of a Collateral Advance Offer, the Collateral Advance Portion) (such remaining proceeds, the "*Collateral Declined Proceeds*") in any manner not prohibited by the Indenture. To the extent that the aggregate principal amount (or accreted value, as applicable) of Notes and, if applicable, Pari Passu Indebtedness, tendered pursuant to an Asset Sale Offer is less than the Excess Proceeds (or, in the case of an Advance Offer, the Advance Portion), the Issuer may use any remaining Excess Proceeds (or, in the case of an Advance Offer, the Advance Portion) (such remaining proceeds, together with any Collateral Declined Proceeds, the "*Declined Proceeds*") in any manner not prohibited by the Indenture. If the aggregate principal amount (or accreted value, as applicable) of Notes or other First Lien Obligations or such other Obligations tendered pursuant to a Collateral Asset Sale Offer exceeds the amount of Collateral Excess Proceeds (or, in the case of a Collateral Advance Offer, the Collateral Advance Portion), the Trustee or applicable depositary shall select the Notes (subject to applicable Euroclear or Clearstream procedures as to global notes) and the Issuer or the representative of such First Lien Obligations or such other Obligations shall select such First Lien Obligations or such other Obligations to be purchased or repaid on a pro rata basis based on the accreted value or aggregate principal amount of the Notes and such First Lien Obligations or such other Obligations tendered, with adjustments as necessary so that no Notes or other First Lien Obligations or such other Obligations, as the case may be, will be repurchased in an unauthorized denomination; *provided* that no Notes of €100,000 or less shall be repurchased in

part. If the aggregate principal amount (or accreted value, as applicable) of Notes or the Pari Passu Indebtedness tendered pursuant to an Asset Sale Offer exceeds the amount of Excess Proceeds (or, in the case of an Advance Offer, the Advance Portion), the Trustee or applicable depositary shall select the Notes (subject to applicable Euroclear or Clearstream procedures as to global notes) and the Issuer or the representative of such Pari Passu Indebtedness shall select such Pari Passu Indebtedness to be purchased or repaid on a pro rata basis based on the accreted value or aggregate principal amount of the Notes and such Pari Passu Indebtedness tendered, with adjustments as necessary so that no Notes or Pari Passu Indebtedness, as the case may be, will be repurchased in an unauthorized denomination; *provided* that no Notes of €100,000 or less shall be repurchased in part. Upon completion of any such Collateral Asset Sale Offer or Asset Sale Offer, the amount of Collateral Excess Proceeds or Excess Proceeds, as the case may be, shall be reset at zero (regardless of whether there are any remaining Collateral Excess Proceeds or Excess Proceeds, as the case may be, upon such completion), and in the case of a Collateral Advance Offer, the Collateral Advance Portion or an Advance Offer, the Advance Portion, as the case may be, shall be excluded in subsequent calculations of Collateral Excess Proceeds or Excess Proceeds, as the case may be. Additionally, upon consummation or expiration of any Collateral Advance Offer or Advance Offer, as the case may be, any remaining Applicable Proceeds shall not be deemed Collateral Excess Proceeds or Excess Proceeds, as the case may be, and the Issuer may use such Applicable Proceeds for any purpose not otherwise prohibited under the Indenture.

Pending the final application of an amount equal to the Applicable Proceeds pursuant to this covenant, the holder of such Applicable Proceeds may apply any Applicable Proceeds temporarily to reduce Indebtedness outstanding under a revolving credit facility (including under the Senior Credit Facilities) or otherwise invest such Applicable Proceeds in any manner not prohibited by the Indenture.

The Issuer will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws or regulations are applicable in connection with the repurchase of the Notes pursuant to an Asset Sale Offer, Advance Offer or Collateral Advance Offer. To the extent that the provisions of any securities laws or regulations conflict with the Asset Sale provisions of the Indenture, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under the Asset Sale provisions described in the Indenture by virtue of such compliance.

The provisions of the Indenture relating to the Issuer's obligation to make an offer to repurchase the Notes as a result of an Asset Sale may be waived or modified at any time with the written consent of the Holders of a majority in aggregate principal amount of the Notes then outstanding. An Asset Sale Offer, Advance Offer or Collateral Advance Offer may be made at the same time as consents are solicited with respect to an amendment, supplement or waiver of the Indenture, the Notes and/or the Guarantees.

The Senior Credit Facilities limit, and future credit agreements or other agreements relating to Indebtedness to which the Issuer (or one of its Affiliates) becomes a party may prohibit or limit, the Issuer from purchasing any Notes pursuant to this Asset Sales covenant. In the event the Issuer is contractually prohibited from purchasing the Notes, the Issuer or one of its Affiliates, as the case may be, may seek the consent of its lenders to the purchase of the Notes or may attempt to refinance the borrowings that contain such prohibition. If the Issuer or one of its Affiliates, as the case may be, does not obtain such consent or repay such borrowings, the Issuer will remain contractually prohibited from purchasing the Notes. In such case, the Issuer's failure to purchase tendered Notes would constitute a Default under the Indenture.

Selection and Notice

With respect to any partial redemption or purchase of Notes made pursuant to the Indenture, selection of the Notes for redemption or purchase will be made in accordance with applicable procedures of Euroclear or Clearstream; *provided* that no Notes of less than €100,000 can be redeemed or repurchased in part.

Notices of redemption or purchase shall be delivered electronically, in accordance with Euroclear or Clearstream procedures in the case of global notes, or mailed by first-class mail, postage prepaid, at least 10 days but except as set forth in the sixth paragraph under "—Optional Redemption," not more than 60 days before the purchase date or Redemption Date to each Holder at such Holder's registered address or otherwise in accordance with the procedures of Euroclear or Clearstream, except that redemption notices may be delivered or mailed more

than 60 days prior to a Redemption Date if the notice is issued in connection with a defeasance of the Notes, a satisfaction and discharge of the Indenture or as specified in the next paragraph. If any Note is to be redeemed or purchased in part only, any notice of redemption or purchase that relates to such Note shall state the portion of the principal amount thereof that has been or is to be redeemed or purchased.

Notice of any redemption of, or any offer to purchase, the Notes may, at the Issuer's discretion, be given in connection with an Equity Offering, other transaction (or series of related transactions) or an event that constitutes a Change of Control and prior to the completion or the occurrence thereof, and any such redemption or purchase may, at the Issuer's discretion, be subject to one or more conditions precedent, including, but not limited to, completion or occurrence of the related Equity Offering, transaction or event, as the case may be. In addition, if such redemption or purchase is subject to satisfaction of one or more conditions precedent, such notice shall describe each such condition, and if applicable, shall state that, in the Issuer's discretion, the Redemption Date or purchase date may be delayed until such time (including more than 60 days after the date the notice of redemption or offer to purchase was mailed or delivered, including by electronic transmission) as any or all such conditions shall be satisfied or waived, or such redemption or purchase may not occur and such notice may be rescinded in the event that any or all such conditions shall not have been satisfied or waived by the Redemption Date or purchase date or by the Redemption Date or purchase date as so delayed, or such notice or offer may be rescinded at any time in the Issuer's discretion if in the good faith judgment of the Issuer any or all of such conditions will not be satisfied or waived. In addition, the Issuer may provide in such notice or offer that payment of the redemption or purchase price and performance of the Issuer's obligations with respect to such redemption or offer to purchase may be performed by another Person. In no event shall the Trustee be responsible for monitoring, or charged with knowledge of, the maximum aggregate amount of the Notes eligible under the Indenture to be redeemed.

With respect to any certificated notes, if any Notes are to be purchased or redeemed in part only, the Issuer will issue a new Note in a principal amount equal to the unredeemed or unpurchased portion of the original Note in the name of the Holder thereof upon cancellation of the original Note; *provided* that the new Notes will only be issued in denominations of €100,000 and any integral multiple of €1,000 in excess thereof. Notes called for redemption or purchase become due on the date fixed for redemption or purchase, unless such redemption or purchase is conditioned on the happening of a future event. On and after the purchase date or Redemption Date, unless the Issuer defaults in payment of the purchase or redemption price, interest shall cease to accrue on Notes or portions of them called for purchase or redemption, unless such redemption or purchase remains conditioned on the occurrence of a future event.

The Issuer may redeem the Notes pursuant to one or more of the relevant provisions in the Indenture, and a single notice of redemption may be delivered with respect to redemptions made pursuant to different provisions. Any such notice may provide that redemptions made pursuant to different provisions will have different Redemption Dates and, with respect to redemptions that occur on the same date, may specify the order in which such redemptions are deemed to occur.

Certain Covenants

Covenant Suspension

Set forth below are summaries of certain covenants to be contained in the Indenture. If on any date following the Issue Date (i) the Notes have Investment Grade Ratings from two of three Rating Agencies and (ii) no Default or Event of Default has occurred and is continuing under the Indenture (the occurrence of the events described in the foregoing clauses (i) and (ii) being collectively referred to as a "*Covenant Suspension Event*"), then beginning on such date and continuing until the Reversion Date (as defined below), the Issuer and its Restricted Subsidiaries will not be subject to the following covenants with respect to the Notes (collectively, the "*Suspended Covenants*"):

(1) "Repurchase at the Option of Holders—Asset Sales;"

(2) "—Limitation on Restricted Payments;"

(3) "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;"

(4) clause (4) of the first paragraph of "—Merger, Consolidation, Amalgamation or Sale of All or Substantially All Assets;"

(5) "—Transactions with Affiliates;"

(6) "—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries;" and

(7) "—Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries."

Upon the occurrence of a Covenant Suspension Event (the date of such occurrence, the "*Suspension Date*"), the amount of Excess Proceeds from any Asset Sale shall be reset at zero. In the event that the Issuer and the Restricted Subsidiaries are not subject to the Suspended Covenants for any period of time as a result of the foregoing, and on any subsequent date (the "*Reversion Date*") one or more of the applicable Rating Agencies withdraw their Investment Grade Rating or downgrade the rating assigned to the Notes below an Investment Grade Rating such that the Notes no longer have Investment Grade Ratings from at least two of three Rating Agencies, then the Issuer and the Restricted Subsidiaries will thereafter again be subject to the Suspended Covenants with respect to future events.

The period of time between (and including) the Suspension Date and the Reversion Date (but excluding the Reversion Date) is referred to in this "Description of Notes" as the "*Suspension Period*." The Guarantees of the Guarantors will be suspended during the Suspension Period and all Liens in favor of the Notes Collateral Agent on the Collateral of such Guarantors will be released during the Suspension Period. In the event of any such reinstatement, no action taken or omitted to be taken by the Issuer or any of the Restricted Subsidiaries prior to such reinstatement will give rise to a Default or Event of Default under the Indenture with respect to the Notes; *provided* that (1) with respect to Restricted Payments made on or after the Reversion Date, the amount of Restricted Payments made will be calculated as though the covenant described under the caption "—Limitation on Restricted Payments" had been in effect prior to, but not during, the Suspension Period (including with respect to a Limited Condition Acquisition or Specified Transaction entered into during the Suspension Period), (2) all Indebtedness incurred, or Disqualified Stock or Preferred Stock issued, during the Suspension Period (or deemed incurred or issued during the Suspension Period in connection with a Limited Condition Acquisition or Specified Transaction entered into during the Suspension Period) will be classified to have been incurred or issued pursuant to clause (3) of the second paragraph of "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," (3) no Subsidiaries shall be designated as Unrestricted Subsidiaries during any Suspension Period, (4) any Affiliate Transaction entered into on or after the Reversion Date pursuant to an agreement entered into during any Suspension Period shall be deemed to be permitted pursuant to clause (6) of the second paragraph of the covenant described under "—Transactions with Affiliates," (5) any encumbrance or restriction on the ability of any Restricted Subsidiary that is not a Subsidiary Guarantor to take any action described in clauses (1) through (3) of the first paragraph of the covenant described under "—Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries" that becomes effective during any Suspension Period shall be deemed to be permitted pursuant to clause (a) of the covenant described under "—Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries," (6) no Subsidiary of the Issuer shall be required to comply with the covenant described under "—Limitation on Guarantees of Indebtedness by Restricted Subsidiaries" on or after the Reversion Date with respect to any guarantee entered into by such Subsidiary during the Suspension Period, (7) all Liens created, incurred or assumed during the Suspension Period in compliance with the Indenture will be deemed to have been outstanding on the Issue Date, so that they are classified as permitted under clause (11) of the definition of "Permitted Liens," (8) all Investments made during the Suspension Period (or deemed made in connection with a Limited Condition Acquisition or Specified Transaction entered into during the Suspension Period) will be classified to have been made pursuant to clause (5) of the definition of "Permitted Investments" and (9) on the Reversion Date, the amount of Excess Proceeds shall be reset at zero.

During the Suspension Period, the Issuer and its Restricted Subsidiaries will be entitled to incur Liens to the extent provided for under "—Liens" (including, without limitation, Permitted Liens). To the extent such covenant and any Permitted Liens refer to one or more Suspended Covenants, such covenant or definition shall be

interpreted as though such applicable Suspended Covenant(s) continued to be applicable during the Suspension Period (but solely for purposes of the "—Liens" covenant and the "Permitted Liens" definition and for no other covenant).

Notwithstanding that the Suspended Covenants may be reinstated after the Reversion Date, (1) no Default, Event of Default or breach of any kind will be deemed to exist under the Indenture, the Notes or the Guarantees with respect to the Suspended Covenants, and none of the Issuer or any of its Subsidiaries shall bear any liability for any actions taken or events occurring during the Suspension Period, or any actions taken at any time pursuant to any contractual obligation arising during any Suspension Period, in each case as a result of a failure to comply with the Suspended Covenants during the Suspension Period (or, upon termination of the Suspension Period or after that time based solely on any action taken or event that occurred during the Suspension Period), and (2) following a Reversion Date, the Issuer and each Restricted Subsidiary will be permitted, without causing a Default or Event of Default, to honor, comply with or otherwise perform any contractual commitments or obligations arising during any Suspension Period and to consummate the transactions contemplated thereby. Following a Reversion Date, all Guarantees and all Collateral and Security Documents shall be reinstated and all actions reasonably necessary to provide that the First Lien Notes Obligations shall have been unconditionally guaranteed by each Guarantor and that the Notes Collateral Agent for its benefit and the benefit of the Trustee and the Holders of the Notes has a valid, perfected, first priority security interest (subject to Permitted Liens) in the Collateral shall be taken within ninety (90) days after such Reversion Date.

There can be no assurance that the Notes will ever achieve or maintain Investment Grade Ratings.

The Issuer shall provide an Officer's Certificate to the Trustee indicating the occurrence of any Covenant Suspension Event or Reversion Date. The Trustee will have no obligation to (i) independently determine or verify if such events have occurred, (ii) make any determination regarding the impact of actions taken during the Suspension Period on the Issuer and its Restricted Subsidiaries' future compliance with their covenants or (iii) notify the Holders of the Notes of any Covenant Suspension Event or Reversion Date.

Limitation on Restricted Payments

The Issuer will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly:

(I) declare or pay any dividend or make any payment or distribution on account of the Issuer's or any of its Restricted Subsidiaries' Equity Interests (in each case, solely to a holder of Equity Interests in such Person's capacity as a holder of such Equity Interests), including any dividend, payment or distribution payable in connection with any merger, amalgamation or consolidation other than:

(a) dividends, payments or distributions by the Issuer payable solely in Equity Interests (other than Disqualified Stock) of the Issuer or in options, warrants or other rights to purchase such Equity Interests (other than Disqualified Stock); or

(b) dividends, payments or distributions by a Restricted Subsidiary so long as, in the case of any dividend, payment or distribution payable on or in respect of any class or series of securities issued by a Restricted Subsidiary other than a Wholly-Owned Subsidiary of the Issuer, the Issuer or a Restricted Subsidiary receives at least its pro rata share of such dividend, payment or distribution in accordance with its Equity Interests in such class or series of securities;

(II) purchase, redeem, defease or otherwise acquire or retire for value any Equity Interests of the Issuer or any Parent Entity, including in connection with any merger, amalgamation or consolidation, in each case held by a Person other than the Issuer or a Restricted Subsidiary;

(III) make any principal payment on, or redeem, repurchase, defease, discharge or otherwise acquire or retire for value, in each case, prior to any scheduled repayment, sinking fund payment or maturity, any Subordinated Indebtedness of the Issuer or any Guarantor, other than:

(a) Indebtedness permitted to be incurred or issued under clauses (7), (8) or (9) of the second paragraph of the covenant described under "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" or

(b) the prepayment, redemption, purchase, defeasance, repurchase, discharge or other acquisition or retirement of Subordinated Indebtedness in anticipation of satisfying a sinking fund obligation, principal installment or final maturity, in each case due within one year of the date of prepayment, redemption, defeasance, purchase, repurchase, discharge or acquisition or retirement; or

(IV) make any Restricted Investment

(all such payments and other actions set forth in clauses (I) through (IV) above (other than any exceptions thereto) being collectively referred to as "*Restricted Payments*"), unless, at the time of such Restricted Payment:

(1) in the case of a Restricted Payment other than a Restricted Investment, no Event of Default shall have occurred and be continuing or would occur as a consequence thereof and, in the case of a Restricted Investment, no Event of Default described under clause (1), (2) or (6) of the first paragraph of "—Events of Default and Remedies" shall have occurred and be continuing or would occur as a consequence thereof;

(2) except in the case of (i) a Restricted Investment and (ii) amounts attributable to subclauses (b) through (f) of clause (3) below, immediately after giving effect to such transaction on a pro forma basis, the Issuer could incur $1.00 of additional Indebtedness under the provisions of the first paragraph of the covenant described under "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" and

(3) such Restricted Payment, together with the aggregate amount of all other Restricted Payments made by the Issuer and its Restricted Subsidiaries after November 21, 2017 (including Restricted Payments permitted by clauses (1) and (6)(c) of the next succeeding paragraph, but excluding all other Restricted Payments permitted by the next succeeding paragraph), is less than the sum of (without duplication):

(a) 50% of the Consolidated Net Income of the Issuer for the period (taken as one accounting period) beginning on October 1, 2017 to the end of the Issuer's most recently ended fiscal quarter for which internal financial statements are available at the time of such Restricted Payment, or, in the case such Consolidated Net Income for such period is a deficit, minus 100% of such deficit (which amount in this clause (a) may not be less than zero); *plus*

(b) 100% of the aggregate net cash proceeds and the fair market value of marketable securities or other property received by the Issuer and its Restricted Subsidiaries since immediately after November 21, 2017 (other than net cash proceeds to the extent such net cash proceeds have been used to incur Indebtedness or issue Disqualified Stock or Preferred Stock pursuant to clause (12)(a) of the second paragraph of "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock") from the issue or sale of:

(i) (A) Equity Interests of the Issuer, including Treasury Capital Stock (as defined below), but excluding cash proceeds and the fair market value of marketable securities or other property received from the sale of:

(x) Equity Interests to any future, current or former employees, directors, managers or consultants of the Issuer, its Subsidiaries or any Parent Entity after November 21, 2017 to the extent such amounts have been applied to Restricted Payments made in accordance with clause (4) of the next succeeding paragraph; and

(y) Designated Preferred Stock; and

(B) Equity Interests of Parent Entities, to the extent such net cash proceeds and/or the fair market value of marketable securities or other property are actually contributed to the Issuer (excluding contributions of the proceeds from the sale of Designated Preferred Stock of such companies or contributions to the extent such amounts have been applied to Restricted Payments made in accordance with clause (4) of the next succeeding paragraph); or

(ii) Indebtedness or Disqualified Stock of the Issuer or any Restricted Subsidiary that has been converted into or exchanged for such Equity Interests (other than Disqualified Stock) of the Issuer or a Parent Entity;

provided, *however*, that this clause (b) shall not include the proceeds from (W) Refunding Capital Stock (as defined below), (X) Equity Interests (or Indebtedness that has been converted or exchanged for Equity Interests) of the Issuer sold to a Restricted Subsidiary, (Y) Disqualified Stock or debt securities that have been converted or exchanged into Disqualified Stock or (Z) Excluded Contributions; *plus*

(c) 100% of the aggregate amount of cash and the fair market value of marketable securities or other property contributed to the capital of the Issuer or a Restricted Subsidiary (including the aggregate amount of any Pari Passu Indebtedness of the Issuer or a Restricted Subsidiary contributed to the Issuer or a Restricted Subsidiary for cancellation (limited, in the case of such Pari Passu Indebtedness, to the lesser of par and the actual purchase price paid in cash to repurchase such Indebtedness)), or that becomes part of the capital of the Issuer or a Restricted Subsidiary through consolidation, amalgamation or merger following November 21, 2017 (other than net cash proceeds to the extent such net cash proceeds (i) have been used to incur Indebtedness or issue Disqualified Stock or Preferred Stock pursuant to clause (12)(a) of the second paragraph of "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," (ii) are contributed by a Restricted Subsidiary or (iii) constitute Excluded Contributions); *plus*

(d) 100% of the aggregate amount received in cash and the fair market value of marketable securities or other property received by the Issuer or a Restricted Subsidiary by means of:

(i) the sale or other disposition (other than to the Issuer or a Restricted Subsidiary) of, or other returns on Restricted Investments made by the Issuer or its Restricted Subsidiaries and repurchases and redemptions of, or cash distributions or cash interest received in respect thereof, such Restricted Investments from the Issuer or its Restricted Subsidiaries and repayments of loans or advances, and releases of guarantees, which constitute Restricted Investments made by the Issuer or its Restricted Subsidiaries, in each case, after November 21, 2017; or

(ii) the sale or other disposition (other than to the Issuer or a Restricted Subsidiary) of the Equity Interests of an Unrestricted Subsidiary or a distribution from an Unrestricted Subsidiary (other than in each case to the extent the Investment in such Unrestricted Subsidiary constituted a Permitted Investment) or a dividend or distribution from an Unrestricted Subsidiary after November 21, 2017; *plus*

(e) in the case of the redesignation of an Unrestricted Subsidiary as a Restricted Subsidiary or the merger, amalgamation or consolidation of an Unrestricted Subsidiary into the Issuer or a Restricted Subsidiary or the transfer of all or substantially all of the assets of an Unrestricted Subsidiary to the Issuer or a Restricted Subsidiary after November 21, 2017, the fair market value of the Investment in such Unrestricted Subsidiary (or the net assets transferred) at the time of the redesignation of such Unrestricted Subsidiary as a Restricted Subsidiary or at the time of such merger, amalgamation, consolidation or transfer of assets, other than to the extent such Investment constituted a Permitted Investment made after November 21, 2017, but including amounts in excess of the original amount of such Permitted Investment; *plus*

(f) the greater of (x) $250.0 million and (y) 25.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period.

As of September 30, 2020, the Issuer would have been able to make Restricted Payments in the amount of approximately $664.3 million pursuant to clause (3) of the immediately preceding paragraph (excluding any amounts that may be available pursuant to clause (3)(b)(i)(B)).

The foregoing provisions will not prohibit:

(1) the payment of any dividend or distribution or the consummation of any irrevocable redemption within 60 days after the date of declaration thereof or the giving of such irrevocable notice, as applicable, if, at the date of declaration or the giving of such notice, such payment would have complied with the provisions of the Indenture (assuming, in the case of a redemption payment, the giving of the notice of such redemption payment would have been deemed to be a Restricted Payment at such time);

(2) (a) the prepayment, redemption, purchase, repurchase, defeasance, discharge, retirement, exchange or other acquisition of any Equity Interests, including any accrued and unpaid dividends thereon ("*Treasury Capital Stock*") or Subordinated Indebtedness of the Issuer or any Restricted Subsidiary or any Equity Interests of any Parent Entity, in exchange for, or in an amount equal to or less than the proceeds of a sale or issuance (other than to a Restricted Subsidiary) of Equity Interests of the Issuer or any Parent Entity to the extent such amount was contributed to the Issuer (in each case, other than any Disqualified Stock) ("*Refunding Capital Stock*") made within 120 days of such sale or issuance of Refunding Capital Stock and (b) if immediately prior to the retirement of Treasury Capital Stock, the declaration and payment of dividends thereon was permitted under clause (6) of this paragraph, the declaration and payment of dividends on the Refunding Capital Stock (other than Refunding Capital Stock the proceeds of which were used to redeem, purchase, repurchase, defease, retire or otherwise acquire any Equity Interests of any Parent Entity) in an aggregate amount per year no greater than the aggregate amount of dividends per annum that were declarable and payable on such Treasury Capital Stock immediately prior to such retirement;

(3) the prepayment, redemption, repurchase, purchase, defeasance, discharge, retirement, exchange or other acquisition of (i) Subordinated Indebtedness of the Issuer or a Guarantor made in exchange for, or in an amount equal to or less than the proceeds of a sale of, new Indebtedness of the Issuer or a Guarantor or Disqualified Stock of the Issuer or a Guarantor made within 120 days of such incurrence or issuance of new Indebtedness or Disqualified Stock or (ii) Disqualified Stock of the Issuer or a Guarantor made in exchange for, or in an amount equal to or less than the proceeds of a sale made within 120 days of incurrence of, Disqualified Stock of the Issuer or a Guarantor made within 120 days of such sale of Disqualified Stock, that, in each case is incurred or issued in compliance with "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" so long as:

(a) the principal amount (or accreted value, if applicable) of such new Indebtedness or the liquidation preference of such new Disqualified Stock does not exceed the principal amount of (or accreted value, if applicable), plus any accrued and unpaid interest on, the Subordinated Indebtedness or the liquidation preference of, plus any accrued and unpaid dividends on, the Disqualified Stock being so prepaid, redeemed, purchased, repurchased, defeased, discharged, retired, exchanged or acquired, plus the amount of any premium (including tender premiums), defeasance costs, underwriting discounts and any fees, costs and expenses incurred in connection with the issuance of such new Indebtedness or Disqualified Stock and such prepayment, redemption, repurchase, defeasance, discharge, retirement, exchange or acquisition;

(b) such new Indebtedness is subordinated to the Notes or the applicable Guarantee at least to the same extent as such Subordinated Indebtedness so prepaid, redeemed, purchased, repurchased, defeased, discharged, retired, exchanged or acquired;

(c) such new Indebtedness or Disqualified Stock has a final scheduled maturity date or mandatory redemption date, as applicable, equal to or later than the final scheduled maturity

date or mandatory redemption date of the Subordinated Indebtedness or Disqualified Stock being so prepaid, redeemed, purchased, repurchased, defeased, discharged, retired, exchanged or acquired (or if earlier, such date that is at least 91 days after the maturity date of the Notes); and

(d) such new Indebtedness or Disqualified Stock has a Weighted Average Life to Maturity equal to or greater than the remaining Weighted Average Life to Maturity of the Subordinated Indebtedness or Disqualified Stock being so prepaid, redeemed, purchased, repurchased, defeased, discharged, retired, exchanged or acquired (or requires no or nominal payments in cash (other than interest payments) prior to the date that is 91 days after the maturity date of the Notes);

(4) a Restricted Payment to pay for the purchase, repurchase, redemption, retirement or other acquisition of Equity Interests (other than Disqualified Stock) of the Issuer or any Parent Entity held by any future, present or former employee, director, officer, member, partner, manager or consultant (or their respective Controlled Investment Affiliates or Immediate Family Members or any permitted transferee thereof) of the Issuer, any of its Subsidiaries or any Parent Entity pursuant to any management, director, employee and/or advisor equity plan or equity option plan, stock appreciation rights plan or any other management, director, employee and/or advisor benefit plan or agreement or any equity subscription or equityholder agreement or any termination agreement (including, for the avoidance of doubt, any principal and interest payable on any Indebtedness issued by the Issuer or any Parent Entity in connection with such repurchase, retirement or other acquisition), including any Equity Interests rolled over by management, directors or employees of the Issuer, any of its Subsidiaries or any Parent Entity in connection with any corporation transaction; *provided*, *however*, that the aggregate Restricted Payments made under this clause (4) do not exceed in any fiscal year $100.0 million (with unused amounts in any fiscal year being carried over to one or more succeeding fiscal years up to a maximum (without giving effect to the following proviso) of $200.0 million carried forward to any fiscal year from preceding fiscal years); *provided*, *further*, that such amount in any fiscal year may be increased by an amount not to exceed:

(a) the cash proceeds from the sale of Equity Interests (other than Disqualified Stock) of the Issuer and, to the extent contributed to the Issuer, the cash proceeds from the sale of Equity Interests of any Parent Entity, in each case to any future, present or former employees, directors, officers, members, partners, managers or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members) of the Issuer, any of its Subsidiaries or any Parent Entity that occurs after November 21, 2017; *provided* that the amount of such cash proceeds utilized for any such repurchase, retirement or other acquisition for value will not increase the amount available for Restricted Payments under clause (3) of the immediately preceding paragraph; *plus*

(b) the cash proceeds of key man life insurance policies received by the Issuer or the Restricted Subsidiaries (or any Parent Entity to the extent contributed to the Issuer) after November 21, 2017; *less*

(c) the amount of any Restricted Payments previously made with the cash proceeds described in clauses (a) and (b) of this clause (4);

provided that the Issuer may elect to apply all or any portion of the aggregate increase contemplated by clauses (a) and (b) of this clause (4) in any fiscal year;

and *provided, further,* that cancellation of Indebtedness owing to the Issuer or any Restricted Subsidiary from any future, present or former employees, directors, officers, members, partners, managers or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members, or any permitted transferee thereof) of the Issuer, any Parent Entity or any of the Issuer's Restricted Subsidiaries in connection with a repurchase of Equity Interests of the Issuer or any Parent Entity will not be deemed to constitute a Restricted Payment for purposes of this covenant or any other provision of the Indenture;

(5) the declaration and payment of dividends to holders of any class or series of Disqualified Stock of the Issuer or any of its Restricted Subsidiaries or any class or series of Preferred Stock of any Restricted Subsidiary, in each case issued in accordance with the covenant described under "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" to the extent such dividends are included in the definition of "Fixed Charges;"

(6) (a) the declaration and payment of dividends to holders of any class or series of Designated Preferred Stock (other than Disqualified Stock) issued by the Issuer or any of its Restricted Subsidiaries after November 21, 2017; *provided* that the amount of dividends paid pursuant to this clause (a) shall not exceed the aggregate amount of cash actually received by the Issuer or its Restricted Subsidiaries from the sale of such Designated Preferred Stock;

(b) the declaration and payment of dividends to a Parent Entity, the proceeds of which will be used to fund the payment of dividends to holders of any class or series of Designated Preferred Stock (other than Disqualified Stock) of such Parent Entity issued after November 21, 2017; *provided* that the amount of dividends paid pursuant to this clause (b) shall not exceed the aggregate amount of cash actually contributed to the Issuer or a Restricted Subsidiary from the sale of such Designated Preferred Stock; or

(c) the declaration and payment of dividends on Refunding Capital Stock that is Preferred Stock in excess of the dividends declarable and payable thereon pursuant to clause (2) of this paragraph;

provided, *however*, in the case of each of clause (a) and clause (c) of this clause (6), that for the Applicable Measurement Period at the date of issuance of such Designated Preferred Stock or the declaration of such dividends on Refunding Capital Stock that is Preferred Stock, after giving effect to such issuance or declaration on a pro forma basis, the Issuer could incur $1.00 of additional Indebtedness under the provisions of the first paragraph of the covenant described under "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;"

(7) payments made or expected to be made by the Issuer or any Restricted Subsidiary in respect of withholding or similar taxes payable in connection with the exercise or vesting of Equity Interests or any other equity award by any future, present or former employee, director, officer, member, partner, manager or consultant (or their respective Controlled Investment Affiliates or Immediate Family Members or any permitted transferee thereof) of the Issuer, any Parent Entity or any of the Issuer's Restricted Subsidiaries and repurchases or withholdings of Equity Interests in connection with the exercise of any stock or other equity options or warrants or other incentive interests or the vesting of equity awards if such Equity Interests represent all or a portion of the exercise price thereof or payments in lieu of the issuance of fractional Equity Interests, or withholding obligation with respect to, such options or warrants or other incentive interests or other Equity Interests or equity awards;

(8) the declaration and payment of dividends on the Issuer's common equity (or the payment of dividends to any Parent Entity to fund a payment of dividends on such entity's common equity) or the redemption, purchase, repurchase, defeasance or other acquisition or retirement of any Equity Interests of the Issuer, following consummation of the first public offering of the Issuer's common equity or the common stock of any Parent Entity after the Issue Date, in an amount not to exceed the sum of (A) 6.0% per annum of the net cash proceeds received by or contributed to the Issuer in or from any such public offering, other than public offerings with respect to the Issuer's common equity registered on Form S-8 (or comparable form) and other than any public sale constituting an Excluded Contribution and (B) an aggregate amount per annum not to exceed 7.0% of Market Capitalization;

(9) Restricted Payments that are made (a) in an amount that does not exceed the aggregate amount of Excluded Contributions received since November 21, 2017 and (b) without duplication with clause (a), in an amount equal to the net cash proceeds from any sale or disposition of, or distribution in respect of, Investments acquired after November 21, 2017, to the extent the acquisition of such Investments was financed in reliance on clause (a);

(10) other Restricted Payments (a) in an aggregate amount taken together with all other Restricted Payments made pursuant to this clause (10), not to exceed the greater of (x) $550.0 million and (y) 50.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period at the time of such Restricted Payment and (b) without duplication with clause (a), in an amount equal to the net cash proceeds from any sale or disposition of, or distribution in respect of, Investments acquired after November 21, 2017, to the extent the acquisition of such Investments was financed in reliance on clause (a);

(11) Restricted Payments made with or in order to consummate the VWR Transaction and the fees and expenses related thereto, including, without limitation, (i) cash payments to holders of Equity Interests (including restricted stock units) under any management equity plan, stock option plan or any other management or employee benefit plan or agreement of VWR and (ii) Restricted Payments to holders of Equity Interests of VWR (immediately prior to giving effect to the VWR Transaction) in connection with, or as a result of, their exercise of appraisal rights and the settlement of any claims or actions (whether actual, contingent or potential) with respect thereto, in each case, with respect to the VWR Transaction;

(12) the prepayment, redemption, purchase, repurchase, defeasance, discharge, retirement, exchange or other acquisition of any Subordinated Indebtedness (i) in accordance with provisions similar to those described under the captions "—Repurchase at the Option of Holders—Change of Control" and "—Repurchase at the Option of Holders—Asset Sales" or (ii) from any Declined Proceeds; *provided* that (x) at or prior to such prepayment, redemption, purchase, repurchase, defeasance, discharge, retirement, exchange or other acquisition, the Issuer (or a third Person permitted by the Indenture) has made a Change of Control Offer or Asset Sale Offer, as the case may be, with respect to the Notes to the extent required as a result of such Change of Control, Asset Sale, Alternate Offer, Advance Offer or Collateral Advance Offer, as the case may be, and (y) all Notes tendered by Holders in connection with the relevant Change of Control Offer, Asset Sale Offer, Alternate Offer, Advance Offer or Collateral Advance Offer, as applicable, have been prepaid, redeemed, purchased, repurchased, defeased, discharged, retired, exchanged or acquired;

(13) the declaration and payment of dividends or distributions by the Issuer, or the making of loans, to any Parent Entity in amounts required for any Parent Entity to pay or cause to be paid, in each case, without duplication,

(a) franchise, excise and similar taxes and other fees, taxes and expenses, in each case, required to maintain their corporate or other legal existence;

(b) for any taxable period for which the Issuer and/or any of its Subsidiaries are members of a consolidated, combined or unitary tax group for U.S. federal and/or applicable state, local, provincial, territorial or foreign income or similar tax purposes of which a Parent Entity is the common parent (a "*Tax Group*"), the portion of any U.S. federal, state, local, provincial, territorial or foreign income or similar taxes (as applicable), including any interest or penalties related thereto, of such Tax Group for such taxable period that are attributable to the taxable income of the Issuer and/or its Subsidiaries; *provided* that payments made pursuant to this subclause (b) shall not exceed the amount of liability that the Issuer and/or its Subsidiaries (as applicable) would have incurred were such taxes determined as if such entity(ies) were a stand-alone taxpayer or a stand-alone group; *provided*, *further*, that payments under this clause (b) in respect of any taxes attributable to the income of any Unrestricted Subsidiaries of the Issuer may be made only to the extent that such Unrestricted Subsidiaries have made cash payments for such purpose to Issuer or the Restricted Subsidiaries;

(c) customary salary, bonus, severance and other benefits payable to, and indemnities provided on behalf of, future, current or former officers, employees, directors, members, partners, managers and consultants of any Parent Entity to the extent such salaries, bonuses, severance and other benefits and indemnities are attributable to the ownership or operation of the Issuer and the Restricted Subsidiaries, including the Issuer's or the Restricted Subsidiaries' proportionate share of such amount relating to such Parent Entity being a Public Company;

(d) general corporate, organizational, operating, administrative, compliance, overhead and other costs and expenses (including, without limitation, expenses related to the maintenance of corporate or other existence and auditing or other accounting or tax reporting matters) and listing fees and other costs and expenses attributable to being a Public Company, of any Parent Entity;

(e) fees and expenses related to any equity or debt offering, financing transaction, acquisitions, divestitures, investments or other non-ordinary course transaction (whether or not successful) of such Parent Entity; *provided* that any such offering, transaction, acquisition, divestiture, investment or other transaction was intended to be for the benefit of the Issuer and its Restricted Subsidiaries;

(f) amounts (including fees and expenses) that would otherwise be permitted to be paid directly by the Issuer or its Restricted Subsidiaries pursuant to the covenant under "—Transactions with Affiliates" (except transactions described in clause (2) of the second paragraph of such covenant);

(g) cash payments in lieu of issuing fractional shares or interests in connection with the exercise of warrants, options, other equity-based awards or other securities convertible into or exchangeable for Equity Interests of the Issuer or any Parent Entity and any dividends, split or combination thereof;

(h) any Restricted Payments permitted by clause (4) and (11) of this paragraph; and

(i) to finance any Investment by a Parent Entity that would otherwise be permitted to be made pursuant to this covenant if made by the Issuer; *provided* that (A) such Restricted Payment shall be made substantially concurrently with the closing of such Investment, (B) such Parent Entity shall, immediately following the closing thereof, cause (1) all property acquired (whether assets or Equity Interests but not including any loans or advances made pursuant to clause (15) or (16) of the definition of "Permitted Investments") to be contributed to the capital of the Issuer or one of its Restricted Subsidiaries (which contribution is not an Excluded Contribution) or (2) the Person formed or acquired to merge into, or amalgamate or consolidate with, the Issuer or one of its Restricted Subsidiaries (to the extent not prohibited by the covenant described under the caption "—Merger, Consolidation, Amalgamation or Sale of All or Substantially All Assets" below) in order to consummate such Investment, (C) to the extent constituting an Investment, such Investment shall be deemed to be made by the Issuer or such Restricted Subsidiary pursuant to another provision of this covenant or pursuant to the definition of "Permitted Investments" and (D) any property received by the Issuer or a Restricted Subsidiary will not increase amounts available for Restricted Payments pursuant to clause (3) of the second immediately preceding paragraph;

(14) the purchase, repurchase, redemption or other acquisition or retirement of Equity Interests of the Issuer or any Restricted Subsidiary or any Parent Entity deemed to occur in connection with (a) paying cash in lieu of fractional shares of such Equity Interests in connection with a share dividend, distribution, share split, reverse share split, merger, consolidation, amalgamation or other business combination of the Issuer or a Restricted Subsidiary or any Parent Entity, in each case, permitted under the Indenture and (b) cash payments made in accordance with any conversion request by a holder of securities convertible into or exchangeable for Equity Interests of the Issuer or any Restricted Subsidiary or any Parent Entity;

(15) the distribution, by dividend or otherwise, or other transfer or disposition of shares of Capital Stock of an Unrestricted Subsidiary (or a Restricted Subsidiary that, directly or indirectly, owns the Equity Interests of one or more Unrestricted Subsidiaries and no other assets (other than de minimis assets)), or Indebtedness owed to the Issuer or a Restricted Subsidiary by an Unrestricted Subsidiary (or a Restricted Subsidiary that, directly or indirectly, owns the Equity Interests of one or more Unrestricted

Subsidiaries and no other assets (other than de minimis assets)), in each case, other than Unrestricted Subsidiaries, the primary assets of which are cash and/or Cash Equivalents;

(16) any Restricted Payment; *provided* that on a *pro forma* basis after giving effect to such Restricted Payment, the Consolidated Total Debt Ratio would be equal to or less than 5.00 to 1.00;

(17) payments or distributions to satisfy dissenters' or appraisal rights and the settlement of any claims or actions (whether actual, contingent or potential) with respect thereto, pursuant to or in connection with a consolidation, amalgamation, merger or transfer of assets that complies with "—Merger, Consolidation, Amalgamation or Sale of All or Substantially All Assets;"

(18) distributions or payments of Receivables Fees and purchases of receivables in connection with any Permitted Receivables Financing or any repurchase obligation in connection therewith;

(19) any purchase, repurchase, redemption, defeasance or other acquisition or retirement of Subordinated Indebtedness consisting of Acquired Indebtedness;

(20) mandatory redemptions of Disqualified Stock; and

(21) Restricted Payments in an aggregate amount not to exceed an amount equal to (i) the sum of, without duplication Declined Proceeds less (ii) any amounts that have been used for Restricted Payments permitted by clause (12) of this paragraph.

provided, *however*, that at the time of, and after giving effect to, any Restricted Payment permitted under clauses (10) and (16), there is no continuous Event of Default under clauses (1), (2) or (6) under "Events of Default and Remedies."

For purposes of determining compliance with this covenant, in the event that a proposed Restricted Payment or Investment (or a portion thereof) meets the criteria of more than one of the categories of Restricted Payments described in the preceding clauses (1) through (21) above and/or one or more of the clauses contained in the definition of "Permitted Investments," or is entitled to be made pursuant to the first paragraph of this covenant the Issuer will be entitled to divide or classify (or later divide, classify or reclassify in whole or in part in its sole discretion) such Restricted Payment or Investment (or portion thereof) among such clauses (1) through (21) and such first paragraph and/or one or more of the clauses contained in the definition of "Permitted Investments," in a manner that otherwise complies with this covenant. In the event that a Restricted Payment (or any portion thereof) or Permitted Investment (or any portion thereof) is divided, classified or reclassified under clause (16) above or clause (28) of the definition of "Permitted Investments" (such clauses, the "*Incurrence Clauses*"), the determination of the amount of such Restricted Payment or Permitted Investment that may be made pursuant to the Incurrence Clauses shall be made without giving pro forma effect to any substantially concurrent incurrence of Indebtedness to finance any other portion of such Restricted Payment or Permitted Investment or any other Restricted Payment or Permitted Investment divided, classified or reclassified under the first paragraph of this covenant and/or one or more of the preceding clauses or one or more clauses of the definition of "Permitted Investments" other than an Incurrence Clause.

The amount of all Restricted Payments (other than cash) will be the fair market value on the Transaction Test Date, in the case of a Limited Condition Acquisition or Specified Transaction, or the date of the Restricted Payment of the assets or securities proposed to be transferred or issued by the Issuer or any Restricted Subsidiary, as the case may be, pursuant to the Restricted Payment.

As of the Issue Date, all of the Issuer's Subsidiaries will be Restricted Subsidiaries. The Issuer will not permit any Unrestricted Subsidiary to become a Restricted Subsidiary except pursuant to the penultimate sentence of the definition of "Unrestricted Subsidiary." For purposes of designating any Restricted Subsidiary as an Unrestricted Subsidiary, all outstanding Investments by the Issuer and the Restricted Subsidiaries (except to the extent repaid) in the Subsidiary so designated will be deemed to be Restricted Payments or Permitted Investments in an amount determined as set forth in the last sentence of the definition of "Investments." Such designation will be permitted

only if a Restricted Payment or Permitted Investment in such amount would be permitted at such time, whether pursuant to this covenant or pursuant to the definition "Permitted Investments," and if such Subsidiary otherwise meets the definition of an Unrestricted Subsidiary. Unrestricted Subsidiaries will not be subject to any of the restrictive covenants set forth in the Indenture and will not guarantee the Notes.

For the avoidance of doubt, this covenant will not restrict the making of any "AHYDO catch up payment" with respect to, and required by the terms of, any Indebtedness of the Issuer or any of its Restricted Subsidiaries permitted to be incurred under the terms of the Indenture.

Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock

The Issuer will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur, issue, assume, guarantee or otherwise become directly or indirectly liable, contingently or otherwise (collectively, "*incur*" and collectively, an "*incurrence*") with respect to any Indebtedness (including Acquired Indebtedness) and the Issuer will not issue any shares of Disqualified Stock and will not permit any Restricted Subsidiary to issue any shares of Disqualified Stock or Preferred Stock; *provided*, *however*, that the Issuer may incur Indebtedness (including Acquired Indebtedness) and issue shares of Disqualified Stock, and any of its Restricted Subsidiaries may incur Indebtedness (including Acquired Indebtedness), and issue shares of Disqualified Stock or Preferred Stock, if either (x) the Fixed Charge Coverage Ratio of the Issuer for the Applicable Measurement Period would have been at least 2.00 to 1.00 or (y) the Consolidated Total Debt Ratio for the Applicable Measurement Period would have been equal to or less than 6.90 to 1.00, in each case, determined on a pro forma basis (including a pro forma application of the net proceeds therefrom), as if the additional Indebtedness had been incurred, or the Disqualified Stock or Preferred Stock had been issued, as the case may be, and the application of proceeds therefrom had occurred at the beginning of such Applicable Measurement Period; *provided*, *further*, that Restricted Subsidiaries that are not Subsidiary Guarantors may not incur Indebtedness or issue Disqualified Stock or Preferred Stock if, after giving pro forma effect to such incurrence or issuance (including a pro forma application of the net proceeds therefrom), more than an aggregate of the greater of (x) $550.0 million and (y) 50.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period of Indebtedness or Disqualified Stock or Preferred Stock of Restricted Subsidiaries that are not Subsidiary Guarantors incurred pursuant to this paragraph, together with amounts incurred under clause (14)(x) of the next paragraph by Restricted Subsidiaries that are not Subsidiary Guarantors, would be outstanding at such time.

The foregoing limitations will not apply to:

(1) the incurrence of Indebtedness under Credit Facilities by the Issuer or any Restricted Subsidiary and the issuance and creation of letters of credit, indemnities, guarantees, exposure transmittal memoranda, bankers' acceptances and similar forms of credit support issued or created thereunder (with letters of credit, indemnities, guarantees, exposure transmittal memoranda, bankers' acceptances and similar forms of credit support being deemed to have a principal amount equal to the face amount thereof), up to an aggregate principal amount then outstanding not to exceed the sum of (a) $4,100.0 million plus (b) an additional amount after all amounts have been incurred under clause (1)(a), if after giving pro forma effect to the incurrence of such additional amount and the application of the proceeds therefrom, the Consolidated First Lien Debt Ratio for the Applicable Measurement Period would be no greater than 5.00 to 1.00; *provided* that for purposes of determining the amount that may be incurred under this clause (1)(b), all Indebtedness incurred under this clause (1)(b) shall be deemed to be included in clause (1) of the definition of "Consolidated First Lien Debt Ratio";

(2) the incurrence by the Issuer and any Guarantor of Indebtedness represented by the Notes (including any Guarantee thereof) (other than any Additional Notes, if any, or guarantees with respect thereto);

(3) Indebtedness of the Issuer and its Restricted Subsidiaries in existence on the Issue Date (other than Indebtedness described in clauses (1) and (2)), including the Existing Senior Notes (including any guarantees with respect thereto);

(4) Indebtedness (including Financing Lease Obligations and Purchase Money Obligations), Disqualified Stock and Preferred Stock incurred by the Issuer or any of its Restricted Subsidiaries, to finance the purchase, lease, expansion, construction, development, replacement, relocation, renewal, maintenance, upgrade, installation, replacement, repair or improvement of property (real or personal), equipment or any other asset; *provided* that the aggregate amount of Indebtedness, Disqualified Stock and Preferred Stock incurred or issued and outstanding pursuant to this clause (4) when aggregated with all outstanding Indebtedness under clause (13) of the second paragraph of this covenant incurred to refinance Indebtedness initially incurred in reliance on this clause (4) does not at the time of such incurrence exceed (a) the greater of (x) $385.0 million and (y) 35.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period (for the avoidance of doubt, Unsecured Financing Leases shall be permitted in an unlimited amount pursuant to clause (31)), plus (b) at the time of such incurrence, an amount equal to the maximum principal amount of such Indebtedness that could be incurred such that after giving effect to the incurrence of such Indebtedness, the Consolidated Secured Debt Ratio of the Issuer for the Applicable Measurement Period would be no greater than 5.00 to 1.00;

(5) (a) Indebtedness incurred by the Issuer or any of its Restricted Subsidiaries constituting reimbursement obligations with respect to letters of credit, bankers' acceptances, bank guarantees, warehouse receipts or similar instruments issued or entered into, or relating to obligations or liabilities incurred, in the ordinary course of business or consistent with past practice, including letters of credit in favor of suppliers or trade creditors or in respect of workers' compensation claims, performance, completion or surety bonds, health, disability or other employee benefits or property, casualty or liability insurance or self-insurance or other Indebtedness with respect to obligations regarding workers' compensation claims, performance, completion or surety bonds, health, disability or other employee benefits or property, casualty or liability insurance or self-insurance and (b) Indebtedness of the Issuer or any of its Restricted Subsidiaries as an account party in respect of letters of credit, bank guarantees or similar instruments or other guarantee obligations in favor of suppliers, customers, franchisees, lessors, licensees, sublicensees, distribution partners or other creditors issued in the ordinary course of business or consistent with past practice;

(6) Indebtedness arising from agreements of the Issuer or any of its Restricted Subsidiaries providing for indemnification, adjustment of purchase price, earn-out or similar obligations, in each case, incurred or assumed in connection with the acquisition or disposition of any business, assets, a Subsidiary or an Investment, other than guarantees of Indebtedness incurred by any Person acquiring all or any portion of such business, assets or a Subsidiary for the purpose of financing such acquisition;

(7) Indebtedness, Disqualified Stock and Preferred Stock of the Issuer to a Restricted Subsidiary; *provided* that any such Indebtedness, Disqualified Stock or Preferred Stock owing to a Restricted Subsidiary that is not a Subsidiary Guarantor, excluding any Indebtedness, Disqualified Stock or Preferred Stock in respect of accounts payable incurred or issued in connection with goods and services rendered in the ordinary course of business or consistent with past practice (and not in connection with the borrowing of money), is expressly subordinated in right of payment (to the extent permitted by applicable law and it does not result in material adverse tax consequences) to the Notes; *provided*, *further*, that any subsequent issuance or transfer (other than the incurrence of a Permitted Lien) of any Capital Stock or any other event which results in any such Restricted Subsidiary ceasing to be a Restricted Subsidiary or any other subsequent transfer of any such Indebtedness, Disqualified Stock or Preferred Stock (except to the Issuer or another Restricted Subsidiary or any pledge of such Indebtedness, Disqualified Stock or Preferred Stock constituting a Permitted Lien (but not foreclosure thereon)) shall be deemed, in each case, to be an incurrence of such Indebtedness, Disqualified Stock or Preferred Stock (to the extent such Indebtedness, Disqualified Stock or Preferred Stock is then outstanding) not permitted by this clause;

(8) Indebtedness of a Restricted Subsidiary owing to the Issuer or another Restricted Subsidiary; *provided* that if a Subsidiary Guarantor incurs such Indebtedness owing to a Restricted Subsidiary that is not a Subsidiary Guarantor, excluding any Indebtedness in respect of accounts payable incurred in connection with goods and services rendered in the ordinary course of business or consistent with past practice (and not in connection with the borrowing of money), such Indebtedness is expressly subordinated in right of payment (to the extent permitted by applicable law and it does not result in material

adverse tax consequences) to the Notes or the Guarantee of the Notes of such Subsidiary Guarantor; *provided*, *further*, that any subsequent issuance or transfer (other than the incurrence of a Permitted Lien) of any Capital Stock or any other event that results in any such Restricted Subsidiary to which such Indebtedness is owed ceasing to be a Restricted Subsidiary or any other subsequent transfer of any such Indebtedness (except to the Issuer or another Restricted Subsidiary or any pledge of such Indebtedness constituting a Permitted Lien (but not foreclosure thereon)) shall be deemed, in each case, to be an incurrence of such Indebtedness (to the extent such Indebtedness is then outstanding) not permitted by this clause;

(9) shares of Preferred Stock or Disqualified Stock of a Restricted Subsidiary issued to the Issuer or another Restricted Subsidiary; *provided* that any subsequent issuance or transfer (other than the incurrence of a Permitted Lien) of any Capital Stock or any other event that results in any Restricted Subsidiary that holds such Preferred Stock or Disqualified Stock ceasing to be a Restricted Subsidiary or any other subsequent transfer of any such shares of Preferred Stock or Disqualified Stock (except to the Issuer or another Restricted Subsidiary or any pledge of such Capital Stock constituting a Permitted Lien (but not foreclosure thereon)) shall be deemed in each case to be an issuance of such shares of Preferred Stock or Disqualified Stock, as applicable (to the extent such Preferred Stock or Disqualified Stock is then outstanding), not permitted by this clause;

(10) Hedging Obligations (excluding Hedging Obligations entered into for speculative purposes);

(11) obligations in respect of self-insurance and obligations in respect of stays, customs, performance, indemnity, bid, appeal, judgment, surety and other similar bonds or instruments and performance, bankers' acceptance facilities and completion guarantees, customs, VAT or other tax guarantees and similar obligations provided by the Issuer or any of its Restricted Subsidiaries or obligations in respect of letters of credit, bank guarantees or similar instruments related thereto, in each case, in the ordinary course of business or consistent with past practice;

(12) (a) Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or any of its Restricted Subsidiaries in an aggregate principal amount or liquidation preference up to 100.0% of the net cash proceeds received by the Issuer and its Restricted Subsidiaries since immediately after November 21, 2017 from the issue or sale of Equity Interests of the Issuer or cash contributed to the capital of the Issuer or any Parent Entity (which proceeds are contributed to the Issuer) (in each case, other than Excluded Contributions or proceeds of Disqualified Stock or sales of Equity Interests to the Issuer or any of its Subsidiaries) as determined in accordance with clauses (3)(b) and (3)(c) of the first paragraph of "—Limitation on Restricted Payments" to the extent such net cash proceeds or cash have not been applied pursuant to such clauses to make Restricted Payments or to make other Investments, payments or exchanges pursuant to the third paragraph of "—Limitation on Restricted Payments" or to make Permitted Investments (other than Permitted Investments specified in clauses (1), (2) and (3) of the definition thereof) and (b) Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or any Restricted Subsidiary in an aggregate principal amount or liquidation preference, which when aggregated with the principal amount and liquidation preference of all other outstanding Indebtedness, Disqualified Stock and Preferred Stock incurred or issued pursuant to this clause (12)(b), and all outstanding Indebtedness under clause (13) of the second paragraph of this covenant incurred to refinance Indebtedness initially incurred in reliance on this clause (12)(b), does not exceed, at the time of such incurrence or issuance, the greater of (x) $1,100.0 million and (y) 100.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period (it being understood that any Indebtedness, Disqualified Stock or Preferred Stock incurred pursuant to this clause (12)(b) shall cease to be deemed incurred or outstanding for purposes of this clause (12)(b) but shall be deemed incurred pursuant to the first paragraph of this covenant from and after the first date on which the Issuer or such Restricted Subsidiary could have incurred such Indebtedness, Disqualified Stock or Preferred Stock under the first paragraph of this covenant without reliance on this clause (12)(b));

(13) the incurrence by the Issuer or any of its Restricted Subsidiaries of Indebtedness or the issuance by the Issuer or any Restricted Subsidiary of Disqualified Stock or Preferred Stock that serves to refund, refinance, replace, renew, extend or defease (collectively, "*refinance*" with "*refinances*,"

"*refinanced*" and "*refinancing*" having a correlative meaning) any Indebtedness, Disqualified Stock or Preferred Stock (or unutilized commitment in respect of Indebtedness that constitutes Elected Amounts) of the Issuer or any of its Restricted Subsidiaries incurred or issued as permitted under the first paragraph of this covenant and clauses (2), (3), (4), and (12), this clause (13) and clauses (14), (18), and (27) of the second paragraph of this covenant or any Indebtedness, Disqualified Stock or Preferred Stock incurred or issued to so refinance such Indebtedness (or unutilized commitment in respect of Indebtedness that constitutes Elected Amounts), Disqualified Stock or Preferred Stock including, in each case, additional Indebtedness, Disqualified Stock or Preferred Stock incurred to pay accrued but unpaid interest, dividends, premiums (including tender premiums), defeasance costs, underwriting discounts, fees, costs and expenses (including upfront fees, original issue discount (in lieu of upfront fees) or similar fees) in connection with such refinancing (the "*Refinancing Indebtedness*") on or prior to its respective maturity; *provided*, *however*, that such Refinancing Indebtedness:

(a) has a Weighted Average Life to Maturity at the time such Refinancing Indebtedness is incurred which is not less than the remaining Weighted Average Life to Maturity of the Indebtedness, Disqualified Stock or Preferred Stock being refinanced (or requires no or nominal payments in cash (other than interest payments) prior to the date that is 91 days after the maturity date of the Notes),

(b) to the extent such Refinancing Indebtedness refinances (i) Indebtedness subordinated in right of payment to the Notes or any Guarantee thereof, such Refinancing Indebtedness is subordinated in right of payment to the Notes or such Guarantee at least to the same extent as the Indebtedness being refinanced or (ii) Disqualified Stock or Preferred Stock, such Refinancing Indebtedness must be Disqualified Stock or Preferred Stock, respectively, and

(c) shall not include:

(i) Indebtedness, Disqualified Stock or Preferred Stock of a Subsidiary of the Issuer that is not a Subsidiary Guarantor that refinances Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or a Guarantor; or

(ii) Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or a Restricted Subsidiary that refinances Indebtedness, Disqualified Stock or Preferred Stock of an Unrestricted Subsidiary;

and *provided further* that subclause (a) of this clause (13) will not apply to any refinancing of any Secured Indebtedness;

(14) Indebtedness, Disqualified Stock or Preferred Stock of (x) the Issuer or a Restricted Subsidiary incurred or issued to finance an acquisition or Investment or (y) Persons that are acquired by the Issuer or a Restricted Subsidiary or merged into, amalgamated with or consolidated with the Issuer or a Restricted Subsidiary in accordance with the terms of the Indenture (including designating an Unrestricted Subsidiary as a Restricted Subsidiary); *provided* that after giving *pro forma* effect to such acquisition, Investment, merger, amalgamation or consolidation, either: (a)(i) the Issuer would be permitted to incur at least $1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in the first paragraph of this covenant, or (ii) the Fixed Charge Coverage Ratio of the Issuer for the Applicable Measurement Period is equal to or greater than immediately prior to such acquisition, Investment, merger, amalgamation or consolidation; (b)(i) the Issuer would be permitted to incur at least $1.00 of additional Indebtedness pursuant to the Consolidated Total Debt Ratio test set forth in the first paragraph of this covenant, or (ii) the Consolidated Total Debt Ratio of the Issuer for the Applicable Measurement Period is equal to or less than immediately prior to such acquisition, Investment, merger, amalgamation or consolidation or (c)(i) the Issuer would be permitted to incur at least $1.00 of additional Indebtedness pursuant to the Consolidated First Lien Debt Ratio test set forth in clause (1) of this paragraph or (ii) the Consolidated First Lien Debt Ratio of the Issuer for the Applicable Measurement Period is equal to or less than immediately prior to such acquisition, Investment, merger, amalgamation or consolidation;

provided, *however*, that on a pro forma basis, the amount of Indebtedness, Disqualified Stock or Preferred Stock that may be incurred or issued by Restricted Subsidiaries that are not Subsidiary Guarantors pursuant to clause (14)(x), together with amounts incurred and outstanding pursuant to the second proviso of the first paragraph of this covenant and clause (18) by Restricted Subsidiaries that are not Subsidiary Guarantors and all outstanding amounts of Indebtedness under clause (13) incurred to refinance Indebtedness either initially incurred in reliance on clause (14)(x) or incurred and outstanding pursuant to such second proviso or clause (18), shall not exceed, at the time of such incurrence or issuance, the greater of (x) $550.0 million and (y) 50.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period;

(15) (a) Cash Management Obligations and (b) Indebtedness in respect of netting services, overdraft protections and similar arrangements and other Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument drawn against insufficient funds in the ordinary course of business or consistent with past practice (including Indebtedness owed on a short-term basis of no longer than 30 days to banks and other financial institutions incurred in the ordinary course of business or consistent with past practice of the Issuer and its Restricted Subsidiaries with such banks or financial institutions that arises in connection with ordinary banking arrangements to manage cash balances of the Issuer and its Restricted Subsidiaries);

(16) Indebtedness of the Issuer or any of its Restricted Subsidiaries supported by a letter of credit, bank guarantee or other instrument issued pursuant to any Credit Facility, in a principal amount not in excess of the stated amount of such letter of credit, bank guarantee or such other instrument;

(17) (a) any guarantee by the Issuer or any Restricted Subsidiary of Indebtedness or other obligations of the Issuer or any Restricted Subsidiary so long as the incurrence of such Indebtedness incurred by the Issuer or such Restricted Subsidiary is permitted under the terms of the Indenture, or

(b) any co-issuance by the Issuer or any Restricted Subsidiary of Indebtedness of the Issuer or any Restricted Subsidiary permitted under the terms of the Indenture;

(18) Indebtedness, Disqualified Stock or Preferred Stock of the Issuer or any of its Restricted Subsidiaries incurred or issued to finance or assumed in connection with an acquisition or Investment in an aggregate principal amount, together with all other outstanding Indebtedness, Disqualified Stock or Preferred Stock issued under this clause (18) and any outstanding Indebtedness under clause (13) incurred to refinance Indebtedness initially incurred in reliance on this clause (18), not to exceed, at the time of incurrence of such Indebtedness or issuance of Disqualified Stock or Preferred Stock, the sum of (x) $200.0 million plus (y) additional Indebtedness so long as the Consolidated Total Debt Ratio for the Applicable Measurement Period is not greater than 6.90 to 1.00, in each case determined at the time of such assumption on a pro forma basis (it being understood that any Indebtedness, Disqualified Stock or Preferred Stock incurred pursuant to this clause (18) shall cease to be deemed incurred or outstanding for purposes of this clause (18) but shall be deemed incurred pursuant to the first paragraph of this covenant from and after the first date on which the Issuer or such Restricted Subsidiary could have incurred such Indebtedness or issued such Disqualified Stock or Preferred Stock under the first paragraph of this covenant without reliance on this clause (18)); *provided*, *however*, that on a pro forma basis, the Indebtedness, Disqualified Stock or Preferred Stock incurred or issued by Restricted Subsidiaries that are not Subsidiary Guarantors pursuant to clause (18), together with amounts incurred and outstanding pursuant to the second proviso of the first paragraph of this covenant and clause (14)(x) by Restricted Subsidiaries that are not Subsidiary Guarantors and all outstanding amounts of Indebtedness under clause (13) incurred to refinance Indebtedness either initially incurred in reliance on clause (18) or incurred and outstanding pursuant to such second proviso or clause (14)(x), shall not exceed, at the time of such incurrence or issuance, the greater of (x) $550.0 million and (y) 50.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period;

(19) Indebtedness of the Issuer or any of its Restricted Subsidiaries consisting of (a) the financing of insurance premiums or (b) take-or-pay obligations contained in supply arrangements in each case, incurred in the ordinary course of business or consistent with past practice;

(20) Indebtedness consisting of Indebtedness issued by the Issuer or any of its Restricted Subsidiaries to future, current or former officers, directors, employees, members, partners, managers or consultants thereof (or their respective Controlled Investment Affiliates or Immediate Family Members or any permitted transferee thereof) of the Issuer, any Restricted Subsidiary of the Issuer or any Parent Entity, in each case to finance the purchase or redemption of Equity Interests of the Issuer or any Parent Entity to the extent described in clause (4) of the third paragraph under the caption "—Limitation on Restricted Payments;"

(21) Indebtedness under Permitted Receivables Financings;

(22) Indebtedness incurred by the Issuer or any of its Restricted Subsidiaries to the extent that the net proceeds thereof are promptly deposited with the Trustee to satisfy and discharge the Notes or exercise the Issuer's legal defeasance or covenant defeasance as described under "—Legal Defeasance and Covenant Defeasance," in each case, in accordance with the Indenture;

(23) Indebtedness arising from the taking of deposits by a Restricted Subsidiary that constitutes a regulated bank;

(24) Indebtedness attributable to (but not incurred to finance) the exercise of appraisal rights and the settlement of any claims or actions (whether actual, contingent or potential) with respect thereto, in each case, with respect to the VWR Transaction or any other acquisition (by merger, consolidation or amalgamation or otherwise) permitted under the Indenture;

(25) Indebtedness representing deferred compensation to employees of any Parent Entity, the Issuer or any Restricted Subsidiary incurred in the ordinary course of business or consistent with past practice;

(26) Indebtedness consisting of obligations under deferred compensation or any other similar arrangements incurred in connection with the VWR Transaction, any Investment or any acquisition (by merger, consolidation or amalgamation or otherwise) permitted under the Indenture;

(27) Indebtedness of any Restricted Subsidiary that is not a Subsidiary Guarantor; *provided* that the aggregate principal amount of Indebtedness of which the primary obligor or a guarantor is a Restricted Subsidiary that is not a Subsidiary Guarantor outstanding in reliance on this clause (27) shall not exceed, at the time of incurrence thereof and together with any other outstanding Indebtedness incurred under this clause (27) and any outstanding Indebtedness under clause (13) incurred to refinance Indebtedness initially incurred in reliance on this clause (27), the greater of (x) $550.0 million and (y) 50.0% of Consolidated EBITDA for the Applicable Measurement Period;

(28) to the extent constituting Indebtedness, customer deposits and advance payments (including progress premiums) received in the ordinary course of business from customers for goods and services purchased in the ordinary course of business or consistent with past practice;

(29) unfunded pension fund and other employee benefits plan obligations and liabilities incurred in the ordinary course of business or consistent with past practice;

(30) Indebtedness in the form of Financing Lease Obligations arising out of any Sale and Lease-Back Transaction;

(31) Unsecured Financing Leases; and

(32) all premiums (if any), interest (including post-petition interest), fees, expenses, charges and additional or contingent interest on obligations described in clauses (1) through (31) above.

For purposes of determining compliance with this covenant:

(1) in the event that an item of Indebtedness, Disqualified Stock or Preferred Stock (or any portion thereof) meets the criteria of more than one of the categories of permitted Indebtedness, Disqualified Stock or Preferred Stock described in clauses (1) through (32) of the preceding paragraph or is entitled to be incurred pursuant to the first paragraph of this covenant, the Issuer, in its sole discretion, may divide, classify or reclassify all or a portion of such item of Indebtedness, Disqualified Stock or Preferred Stock (or any portion thereof) in any manner that complies with this covenant and will only be required to include the amount and type of such Indebtedness, Disqualified Stock or Preferred Stock (or portion thereof) in one of the above clauses or paragraphs; *provided* that all Indebtedness outstanding under the Senior Credit Facilities on the Issue Date, and any refinancing thereof, will at all times be treated as incurred and outstanding under clause (1) of the preceding paragraph and may not be reclassified;

(2) at the time of incurrence, the Issuer will be entitled to divide and classify an item of Indebtedness in more than one of the types of Indebtedness described in the first and second paragraphs above; and

(3) the principal amount of Indebtedness or the liquidation preference of Disqualified Stock or Preferred Stock outstanding under any clause of this covenant shall be determined after giving effect to the application of proceeds of any such Indebtedness, Disqualified Stock or Preferred Stock to refinance any such other Indebtedness, Disqualified Stock or Preferred Stock.

Accrual of interest or dividends, the accretion of accreted value, the accretion or amortization of original issue discount and the payment of interest or dividends in the form of additional Indebtedness, Disqualified Stock or Preferred Stock will not be deemed to be an incurrence of Indebtedness, Disqualified Stock or Preferred Stock for purposes of this covenant. If Indebtedness, Disqualified Stock or Preferred Stock originally incurred in reliance upon a percentage of Consolidated EBITDA or the Consolidated First Lien Debt Ratio under clause (1) of the second paragraph of this covenant is being refinanced under such clause (1) and such refinancing would cause the maximum amount of Indebtedness, Disqualified Stock or Preferred Stock thereunder to be exceeded at such time, then such refinancing will nevertheless be permitted thereunder and such additional Indebtedness, Disqualified Stock or Preferred Stock will be deemed to have been incurred, and permitted to be incurred, under such clause (1) so long as the principal amount of such refinancing Indebtedness, Disqualified Stock or Preferred Stock does not exceed the principal amount of Indebtedness, Disqualified Stock or Preferred Stock being refinanced plus amounts permitted by the next sentence. Any Indebtedness, Disqualified Stock or Preferred Stock incurred to refinance Indebtedness, Disqualified Stock or Preferred Stock incurred pursuant to clauses (1), (4) and (12) of the second paragraph of this covenant shall be permitted to include additional Indebtedness, Disqualified Stock or Preferred Stock incurred to pay accrued but unpaid interest, dividends, premiums (including tender premiums), defeasance costs, underwriting discounts, fees, costs and expenses (including original issue discount, upfront fees or similar fees) incurred in connection with such refinancing.

For purposes of determining compliance with any U.S. dollar-denominated restriction on the incurrence of Indebtedness, Disqualified Stock or Preferred Stock, the U.S. dollar-equivalent principal amount of Indebtedness or liquidation preference of Disqualified Stock or Preferred Stock denominated in a foreign currency shall be calculated by the Issuer based on the relevant currency exchange rate in effect on the date such Indebtedness, Disqualified Stock or Preferred Stock was deemed to be incurred, in the case of term debt, or first committed, in the case of revolving credit debt, for purposes of this covenant; *provided* that if such Indebtedness, Disqualified Stock or Preferred Stock is incurred to refinance other Indebtedness, Disqualified Stock or Preferred Stock denominated in a foreign currency, and such refinancing would cause the applicable U.S. dollar denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such U.S. dollar-denominated restriction shall be deemed not to have been exceeded so long as the principal amount of such Refinancing Indebtedness or the liquidation preference of such Disqualified Stock or Preferred Stock does not exceed the principal amount of such Indebtedness or the liquidation preference of such Disqualified Stock or Preferred Stock being refinanced, *plus* the aggregate amount of accrued but unpaid interest, dividends, premiums (including tender premiums), defeasance costs, underwriting discounts, fees, costs and expenses (including upfront fees, original issue discount or similar fees) incurred in connection with such refinancing.

Notwithstanding any other provision of this covenant, the maximum amount of Indebtedness that the Issuer may incur pursuant to this covenant shall not be deemed to be exceeded solely as a result of fluctuations in the exchange rate of currencies. The principal amount of any Indebtedness or the liquidation preference of any Disqualified Stock or Preferred Stock incurred to refinance other Indebtedness, Disqualified Stock or Preferred Stock, if incurred in a different currency from the Indebtedness, Disqualified Stock or Preferred Stock being refinanced, shall be calculated by the Issuer based on the currency exchange rate applicable to the currencies in which such respective Indebtedness, Disqualified Stock or Preferred Stock is denominated that is in effect on the date of such refinancing.

The Indenture will not treat (1) unsecured Indebtedness as subordinated or junior to Secured Indebtedness merely because such Indebtedness is unsecured or (2) Indebtedness as subordinated or junior to any other Indebtedness solely because such Indebtedness has a junior priority with respect to shared collateral or because it is secured by sufficient collateral or issued or guaranteed by other obligors.

Liens

The Issuer will not, and will not permit any Subsidiary Guarantor to, directly or indirectly, create, incur or assume any Lien (each, a "*Subject Lien*") that secures Obligations under any Indebtedness or any related guarantee of Indebtedness on any asset or property of the Issuer or any Subsidiary Guarantor, unless:

(1) in the case of Subject Liens on any Collateral, (i) such Subject Lien expressly has Junior Lien Priority on the Collateral relative to the Notes and the Guarantees or (ii) such Subject Lien is a Permitted Lien; and

(2) in the case of any Subject Lien on any asset or property that is not Collateral, (i) the Notes (or a Guarantee in the case of Liens on assets of a Subsidiary Guarantor) are equally and ratably secured, with (or on a senior basis to, in the case such Subject Lien secures any Subordinated Indebtedness) the Obligations secured by such Subject Lien until such time as such Obligations are no longer secured by a Lien or (ii) such Subject Lien is a Permitted Lien.

Any Lien created for the benefit of the Holders pursuant to clause (2)(i) of the preceding paragraph shall provide by its terms that such Lien shall be automatically and unconditionally released and discharged upon the release and discharge of the Lien that gave rise to the obligation to secure the Notes. In addition, in the event that a Subject Lien is or becomes a Permitted Lien, the Issuer may, at its option and without consent from any Holder, elect to release and discharge any Lien created for the benefit of the Holders pursuant to the preceding paragraph in respect of such Subject Lien.

With respect to any Lien securing Indebtedness that was permitted to secure such Indebtedness at the time of the Incurrence of such Indebtedness, such Lien shall also be permitted to secure any Increased Amount of such Indebtedness. The "*Increased Amount*" of any Indebtedness shall mean any increase in the amount of such Indebtedness in connection with any accrual of interest, the accretion of accreted value, the amortization of original issue discount, the payment of interest in the form of additional Indebtedness with the same terms, accretion of original issue discount or liquidation preference and increases in the amount of Indebtedness outstanding solely as a result of fluctuations in the exchange rate of currencies or increases in the value of property securing Indebtedness.

Merger, Consolidation, Amalgamation or Sale of All or Substantially All Assets

The Issuer will not merge, consolidate or amalgamate with or into or wind up into, consummate a Division as the Dividing Person (whether or not the Issuer is the surviving Person), or sell, assign, transfer, lease, convey or otherwise dispose of (including, in each case, by way of Division) all or substantially all of the properties or assets of the Issuer and its Restricted Subsidiaries, taken as a whole, in one or more related transactions, to any Person unless:

(1) the Issuer is the surviving Person or the Person formed by or surviving any such merger, consolidation, amalgamation, winding up or Division (if other than the Issuer) or to which such sale,

assignment, transfer, lease, conveyance or other disposition will have been made is a Person organized or existing under the laws of the jurisdiction of organization of the Issuer or the laws of the United States, any state or territory thereof or the District of Columbia (such Person, as the case may be, being herein called the "*Successor Company*"); *provided* that in the case where the Successor Company is not a corporation, a corporation becomes a co-obligor of the Notes is a corporation;

(2) the Successor Company, if other than the Issuer, expressly assumes all the Obligations of the Issuer under the Indenture and the Notes and the Security Documents, in each case, pursuant to supplemental indentures or other documents or instruments in form reasonably satisfactory to the Trustee;

(3) immediately after such transaction, no Event of Default exists;

(4) immediately after giving pro forma effect to such transaction and any related financing transactions, as if such transactions had occurred at the beginning of the Applicable Measurement Period,

(a) the Successor Company or the Issuer would be permitted to incur at least $1.00 of additional Indebtedness under either the Fixed Charge Coverage Ratio test or the Consolidated Total Debt Ratio test described in the first paragraph of the covenant described under "— Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," or

(b) either (x) the Fixed Charge Coverage Ratio for the Issuer (or the Successor Company, as applicable) and its Restricted Subsidiaries would be equal to or greater than the Fixed Charge Coverage Ratio of the Issuer and its Restricted Subsidiaries for the Applicable Measurement Period immediately prior to such transaction or (y) the Consolidated Total Debt Ratio for the Issuer (or the Successor Company, as applicable) and its Restricted Subsidiaries would be equal to or less than the Consolidated Total Debt Ratio of the Issuer and its Restricted Subsidiaries for the Applicable Measurement Period immediately prior to such transaction;

(5) the Issuer or, if applicable, the Successor Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such merger, consolidation, amalgamation, Division, sale, assignment, transfer, lease, conveyance or disposition and such supplemental indentures or other documents or instruments, if any, comply with the Indenture;

(6) to the extent any assets of the Person which is merged, consolidated or amalgamated with or into the Successor Company are assets of the type which would constitute Collateral under the Security Documents, the Successor Company will take such action as may be reasonably necessary to cause such property and assets to be made subject to the Lien of the Security Documents in the manner and to the extent required in the Indenture or any of the Security Documents and shall take all reasonably necessary action so that such Lien is perfected to the extent required by the Security Documents; and

(7) the Collateral owned by or transferred to the Successor Company shall: (a) continue to constitute Collateral under the Indenture and the Security Documents, (b) be subject to the Lien in favor of the Notes Collateral Agent for the benefit of the Trustee and the Holders of the Notes, and (c) not be subject to any Lien other than Permitted Liens.

The Successor Company will succeed to, and be substituted for the Issuer under the Indenture and the Notes and the Issuer will automatically be released and discharged from its obligations under the Indenture and the Notes. Notwithstanding the foregoing clauses (3) and (4),

(1) any Restricted Subsidiary may merge, consolidate or amalgamate with, wind up or into or consummate a Division as the Dividing Person or sell, assign, transfer, lease, convey or otherwise dispose of all or part of its properties and assets to the Issuer or any Restricted Subsidiary, and

(2) the Issuer may merge, consolidate or amalgamate with or into, wind up, or consummate a Division as the Dividing Person with an Affiliate of the Issuer, solely for the purpose of reincorporating the Issuer in the United States or any state or territory thereof or the District of Columbia.

Subject to the provisions described in the Indenture governing release of a Guarantee, no Subsidiary Guarantor will, and the Issuer will not permit a Subsidiary Guarantor to, merge, consolidate or amalgamate with or into or wind up into or consummate a Division as the Dividing Person (whether or not the Issuer or a Guarantor is the surviving Person), or sell, assign, transfer, lease, convey or otherwise dispose (including, in each case, by way of Division) of all or substantially all of its properties or assets, in one or more related transactions, to any Person unless:

(1) (a) such Subsidiary Guarantor is the surviving Person or the Person formed by or surviving any such merger, consolidation, amalgamation, winding up or Division (if other than such Subsidiary Guarantor) or to which such sale, assignment, transfer, lease, conveyance or other disposition will have been made is a Person organized or existing under the laws of the jurisdiction of organization of such Subsidiary Guarantor, as the case may be, or the laws of the United States or any state or territory thereof or the District of Columbia (such Subsidiary Guarantor or such Person, as the case may be, being herein called the "*Successor Guarantor*");

(b) the Successor Guarantor, if other than such Subsidiary Guarantor, expressly assumes all the obligations of such Subsidiary Guarantor under the Indenture and the Security Documents and such Subsidiary Guarantor's related Guarantee pursuant to supplemental indentures or other documents or instruments in form reasonably satisfactory to the Trustee;

(c) immediately after such transaction, no Event of Default exists;

(d) to the extent any assets of the Subsidiary Guarantor which is merged, consolidated or amalgamated with or into the Successor Person are assets of the type which would constitute Collateral under the Security Documents, the Successor Person will take such action as may be reasonably necessary to cause such property and assets to be made subject to the Lien of the Security Documents in the manner and to the extent required in the Indenture or any of the Security Documents and shall take all reasonably necessary action so that such Lien in perfected to the extent required by the Security Documents; and

(e) the Collateral owned by or transferred to the Successor Person shall: (i) continue to constitute Collateral under the Indenture and the Security Documents, (ii) be subject to the Lien in favor of the Notes Collateral Agent for the benefit of the Trustee and the Holders of the Notes, and (iii) not be subject to any Lien other than Permitted Liens; or

(2) in the case of a Subsidiary Guarantor only, the transaction is not prohibited by the covenant described under "—Repurchase at the Option of Holders—Asset Sales."

Subject to certain limitations described in the Indenture, the Successor Guarantor will succeed to, and be substituted for, such Subsidiary Guarantor under the Indenture, and such Subsidiary Guarantor's Guarantee and the Security Documents, and such Subsidiary Guarantor will automatically be released and discharged from its obligations under the Indenture, such Subsidiary Guarantor's Guarantee and the Security Documents. Notwithstanding the foregoing, any Subsidiary Guarantor may (i) merge, consolidate or amalgamate with or into, wind up into or consummate a Division as the Dividing Person or sell, assign, transfer, lease, convey or otherwise dispose of all or part of its properties and assets to another Guarantor or the Issuer, (ii) merge, consolidate or amalgamate with or into, wind up into or consummate a Division as the Dividing Person with or into the Issuer or an Affiliate of the Issuer solely for the purpose of reincorporating or reorganizing the Subsidiary Guarantor in the United States or any state or territory thereof or the District of Columbia, (iii) convert into a Person organized or existing under the laws of the jurisdiction of organization of such Subsidiary Guarantor or a jurisdiction in the United States, any state or territory thereof or the District of Columbia, (iv) sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its assets comprising of Equity Interest of Subsidiaries that are not Guarantors to the Issuer or one or more Restricted Subsidiaries or (v) liquidate or dissolve or change its legal form if, in the case of a Subsidiary Guarantor, the Board

of the Issuer or the senior management of the Issuer (or any Parent Entity of the Issuer) determines in good faith that such action is in the best interests of the Issuer and is not materially disadvantageous to the Holders, in each case, without regard to the requirements set forth in the preceding paragraph.

Transactions with Affiliates

The Issuer will not, and will not permit any of its Restricted Subsidiaries to, make any payment to, or sell, lease, transfer or otherwise dispose of any of its properties or assets to, or purchase any property or assets from, or enter into or make or amend any transaction, contract, agreement, understanding, loan, advance or guarantee with, or for the benefit of, any Affiliate of the Issuer (each of the foregoing, an "*Affiliate Transaction*") involving aggregate payments or consideration in excess of the greater of (x) $110.0 million and (y) 10.0% of Consolidated EBITDA for the Applicable Measurement Period, unless:

(1) such Affiliate Transaction is on terms, taken as a whole, that are not materially less favorable to the Issuer or the relevant Restricted Subsidiary than those that would have been obtained in a comparable transaction by the Issuer or such Restricted Subsidiary with an unrelated Person on an arm's-length basis or, if in the good faith judgment of the Issuer, no comparable transaction is available with which to compare such Affiliate Transaction, such Affiliate Transaction is otherwise fair to the Issuer or such Restricted Subsidiary from a financial point of view and when such transaction is taken in its entirety; and

(2) the Issuer delivers to the Trustee with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate payments or consideration in excess of the greater of (x) $165.0 million and (y) 15.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period, a resolution adopted by the Board of the Issuer approving such Affiliate Transaction and set forth in an Officer's Certificate certifying that such Affiliate Transaction complies with clause (1) above.

The foregoing provisions will not apply to the following:

(1) (a) transactions between or among the Issuer and a Restricted Subsidiary or between or among Restricted Subsidiaries or, in any case, any entity that becomes a Restricted Subsidiary as a result of such transaction and (b) any merger, amalgamation or consolidation of the Issuer into any Parent Entity; *provided* that such Parent Entity shall have no material liabilities and no material assets other than cash, Cash Equivalents and the Capital Stock of the Issuer and such merger, amalgamation or consolidation is otherwise consummated in compliance with the terms of the Indenture and effected for a *bona fide* business purpose;

(2) Restricted Payments permitted by the provisions of the Indenture described above under the covenant "—Limitation on Restricted Payments" (other than pursuant to clause (13)(f) of the third paragraph of such covenant) and the definition of "Permitted Investments;"

(3) the payment of indemnification and other similar amounts to the Investors and reimbursement of expenses of the Investors, in each case, approved by, or pursuant to arrangements approved by the Board of the Issuer (or any Parent Entity of the Issuer);

(4) the payment of reasonable and customary fees and compensation paid to, and indemnities and reimbursements and employment and severance arrangements provided to or on behalf of, or for the benefit of, former, current or future officers, directors, managers, members, partners, employees or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members or any permitted transferee) of the Issuer, any Restricted Subsidiary of the Issuer or any Parent Entity, including in connection with the VWR Transaction;

(5) transactions in which the Issuer or any of its Restricted Subsidiaries, as the case may be, delivers to the Trustee a letter from an Independent Financial Advisor stating that such transaction is fair to the Issuer or such Restricted Subsidiary from a financial point of view or stating that the terms are not

materially less favorable, when taken as a whole, to the Issuer or the relevant Restricted Subsidiary than those that would have been obtained in a comparable transaction by the Issuer or such Restricted Subsidiary with an unrelated Person on an arm's length basis;

(6) any agreement or arrangement as in effect or contemplated as of the Issue Date (other than any agreement or arrangement of the type described in clause (3) above), or any amendment thereto (so long as any such amendment is not materially disadvantageous in the good faith judgment of the Board of the Issuer or the senior management of the Issuer (or any Parent Entity of the Issuer) to the Holders when taken as a whole as compared to the applicable agreement as in effect on the Issue Date);

(7) the existence of, or the performance by the Issuer or any of its Restricted Subsidiaries of its obligations under the terms of, any stockholders agreement or the equivalent (including any registration rights agreement or purchase agreement related thereto) to which it (or any Parent Entity) is a party on the Issue Date and any similar agreements which it (or any Parent Entity) may enter into thereafter; *provided*, *however*, that the existence of, or the performance by the Issuer or any of its Restricted Subsidiaries (or such Parent Entity) of obligations under any future amendment to any such existing agreement or under any similar agreement entered into after the Issue Date shall only be permitted by this clause (7) to the extent that the terms of any such amendment or new agreement are not otherwise materially disadvantageous in the good faith judgment of the Board of the Issuer or the senior management of the Issuer (or any Parent Entity of the Issuer) to the Holders when taken as a whole as compared to the applicable agreement as in effect on the Issue Date;

(8) the VWR Transaction and the payment of all fees and expenses related to the VWR Transaction (including loans and advances pursuant to clauses (15) and (16) of the definition of "Permitted Investments"), including Transaction Expenses;

(9) transactions with customers, clients, suppliers, contractors, joint venture partners or purchasers or sellers of goods or services that are Affiliates, in each case in the ordinary course of business or that are consistent with past practice and otherwise in compliance with the terms of the Indenture which are fair to the Issuer and its Restricted Subsidiaries, in the reasonable determination of the Board of the Issuer or the senior management thereof (or any Parent Entity of the Issuer), or are on terms, taken as a whole, that are not materially less favorable as might reasonably have been obtained at such time from an unaffiliated party;

(10) the issuance or transfer of (a) Equity Interests (other than Disqualified Stock) of the Issuer and the granting and performing of customary registration rights to any Parent Entity or to any Permitted Holder or to any former, current or future director, manager, officer, member, partner, employee or consultant (or their respective Controlled Investments Affiliates or Immediate Family Members of any of the foregoing, or any permitted transferee thereof) of the Issuer or any of its Subsidiaries or any Parent Entity and (b) directors' qualifying shares and shares issued to foreign nationals as required by applicable law;

(11) transactions in connection with Permitted Receivables Financings;

(12) payments by the Issuer or any of its Restricted Subsidiaries to any of the Investors made for any financial advisory, financing, underwriting or placement services or in respect of other investment banking activities, including, without limitation, in connection with acquisitions or divestitures which payments are approved by the Board of the Issuer or the senior management of the Issuer (or any Parent Entity of the Issuer) in good faith;

(13) payments, loans, advances or guarantees (or cancellation of loans, advances or guarantees) to future, current or former employees, directors, officers, members, partners, managers or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members or any permitted transferee thereof) of the Issuer, any of its Subsidiaries or any Parent Entity and employment agreements, stock option plans and other compensatory or severance arrangements (and any successor plans thereto) and any supplemental executive retirement benefit plans or similar arrangements with any

such employees, directors, officers, members, partners, managers or consultants (or their respective Controlled Investment Affiliates or Immediate Family Members or any permitted transferee thereof) (including salary or guaranteed payments and bonuses) which, in each case, are approved by the Board of the Issuer or the senior management of the Issuer (or any Parent Entity of the Issuer) in good faith;

(14) (A) investments by Permitted Holders in securities or loans of the Issuer or any of its Restricted Subsidiaries (and any payment of out-of-pocket expenses incurred by such Permitted Holders in connection therewith) so long as the investment is being offered generally to other investors on the same or more favorable terms and (B) payments to Permitted Holders in respect of securities or loans of the Issuer or any of its Restricted Subsidiaries contemplated in the foregoing subclause (A) or that were acquired from Persons other than the Issuer and its Restricted Subsidiaries, in each case, in accordance with the terms of such securities or loans;

(15) transactions with a Person that is an Affiliate of the Issuer arising solely because the Issuer or any Restricted Subsidiary owns any Equity Interest in, or controls, such Person;

(16) any lease entered into between the Issuer or any Restricted Subsidiary, on the one hand, and any Affiliate of the Issuer, on the other hand, which is approved by the Board of the Issuer or the senior management of the Issuer (or any Parent Entity of the Issuer) in good faith;

(17) intellectual property licenses entered into in the ordinary course of business or consistent with past practice;

(18) transactions between the Issuer or any Restricted Subsidiary and any other Person that would constitute an Affiliate Transaction solely because a director of such other Person is also a director of the Issuer or any Parent Entity; *provided*, *however*, that such director abstains from voting as a director of the Issuer or such Parent Entity, as the case may be, on any matter including such other Person;

(19) pledges of Equity Interests of Unrestricted Subsidiaries;

(20) payments to and from, and transactions with, any joint ventures entered into in the ordinary course of business or consistent with past practice (including, without limitation, any cash management activities related thereto); and

(21) the entry into and/or the performance of any obligations of the Issuer or any of its Restricted Subsidiaries with respect to any financial advisory, financing, underwriting or placement services or in respect of other investment banking activities, in each case, which are entered into within the ordinary course of business or consistent with past practice.

Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries

The Issuer will not, and will not permit any of its Restricted Subsidiaries that are not Subsidiary Guarantors to, directly or indirectly, create or otherwise cause to become effective any consensual encumbrance or consensual restriction on the ability of any such Restricted Subsidiary that is not a Subsidiary Guarantor to:

(1) (i) pay dividends or make any other distributions to the Issuer or any of its Restricted Subsidiaries that is a Subsidiary Guarantor on its Capital Stock or with respect to any other interest or participation in, or measured by, its profits, or

(ii) pay any Indebtedness owed to the Issuer or any of its Restricted Subsidiaries that is a Subsidiary Guarantor;

(2) make loans or advances to the Issuer or any of its Restricted Subsidiaries that is a Subsidiary Guarantor; or

(3) sell, lease or transfer any of its properties or assets to the Issuer or any of its Restricted Subsidiaries that is a Subsidiary Guarantor,

except (in each case) for such encumbrances or restrictions existing under or by reason of:

(a) contractual encumbrances or restrictions in effect on the Issue Date, including pursuant to the Senior Credit Facilities and the Existing Unsecured Notes and, in each case, the related documentation and related Hedging Obligations;

(b) the Indenture, the Notes and the Guarantees;

(c) Purchase Money Obligations for property acquired in the ordinary course of business and Financing Lease Obligations that impose restrictions of the nature discussed in clause (3) above on the property so acquired;

(d) applicable law or any applicable rule, regulation or order;

(e) any agreement or other instrument of a Person, or relating to Indebtedness or Capital Stock of a Person, which Person is acquired by or merged, consolidated or amalgamated with or into the Issuer or any Restricted Subsidiary (or where such Person is an Unrestricted Subsidiary that is redesignated as a Restricted Subsidiary in accordance with the Indenture), or any other transaction entered into in connection with any such acquisition, merger, consolidation, amalgamation or redesignation, in existence at the time of such acquisition or at the time it merges, consolidates or amalgamates with or into the Issuer or any Restricted Subsidiary or assumed in connection with the acquisition of assets from such Person or at the time it is redesignated (but, in each case, not created in contemplation thereof), which encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Person and its Subsidiaries, or the property or assets of the Person and its Subsidiaries, so acquired or redesignated;

(f) contracts, including sale-leaseback agreements, for the sale or disposition of assets, including customary restrictions with respect to a Subsidiary of (i) the Issuer or (ii) a Restricted Subsidiary pursuant to an agreement that has been entered into for the sale or disposition of Capital Stock or assets of such Subsidiary;

(g) Secured Indebtedness and Liens permitted to be incurred pursuant to the covenants described under "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" and "—Liens" that limit the right of the debtor to dispose of the assets securing such Indebtedness;

(h) restrictions on cash, Cash Equivalents or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business or consistent with past practice or restrictions on cash, Cash Equivalents or other deposits permitted under the covenant "—Liens" or arising in connection with any Permitted Liens;

(i) other Indebtedness, Disqualified Stock or Preferred Stock of Restricted Subsidiaries that are not Subsidiary Guarantors that is permitted to be incurred or issued subsequent to the Issue Date pursuant to the provisions of the covenant described under "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;"

(j) customary provisions in joint venture agreements or arrangements and other similar agreements or arrangements relating to such joint venture;

(k) customary provisions contained in leases, subleases, licenses, sublicenses or similar agreements, including with respect to intellectual property and other agreements, in each case, entered into in the ordinary course of business or consistent with past practice or that in the judgment of the Issuer would not materially impair the Issuer's ability to make payments under the Notes when due;

(l) restrictions or conditions contained in any trading, netting, operating, construction, service, supply, purchase, sale or other agreement to which the Issuer or any of its Restricted Subsidiaries is a party entered into in the ordinary course of business or consistent with past practice; *provided* that such agreement prohibits the encumbrance of solely the property or assets of the Issuer or such Restricted Subsidiary that are the subject to such agreement, the payment rights arising thereunder or the proceeds thereof and does not extend to any other asset or property of the Issuer or such Restricted Subsidiary or the assets or property of another Restricted Subsidiary;

(m) any encumbrance or restriction with respect to a Restricted Subsidiary or Receivables Subsidiary which was previously an Unrestricted Subsidiary which encumbrance or restriction exists pursuant to or by reason of an agreement that such Subsidiary is a party to or entered into before the date on which such Subsidiary became a Restricted Subsidiary; *provided* that such agreement was not entered into in anticipation of an Unrestricted Subsidiary becoming a Restricted Subsidiary and any such encumbrance or restriction does not extend to any assets or property of the Issuer or any other Restricted Subsidiary other than the assets and property of such Subsidiary and its Subsidiaries;

(n) other Indebtedness, Disqualified Stock or Preferred Stock permitted to be incurred subsequent to the Issue Date pursuant to the provisions of the covenant described under "—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" *provided* that, (A) in the good faith judgment of the Issuer, such incurrence will not materially impair the Issuer's ability to make payments under the Notes when due, (B) the encumbrances and restrictions in such Indebtedness, Disqualified Stock or Preferred Stock apply only during the continuance of a default in respect of a payment or financial maintenance covenant relating to such Indebtedness or (C) the encumbrances and restrictions in such Indebtedness, Disqualified Stock or Preferred Stock either are not materially more restrictive taken as a whole than those contained in the Senior Credit Facilities, the Existing Unsecured Notes or the Notes as in effect on the Issue Date or generally represent market terms at the time of incurrence or issuance and are imposed solely on such Restricted Subsidiary and its Subsidiaries and in the judgment of the Issuer would not materially impair the Issuer's ability to make payments under the Notes when due;

(o) restrictions contained in any documentation relating to any Permitted Receivables Financing;

(p) customary provisions in leases, subleases, licenses, sublicenses and other contracts restricting the assignment or other transfer thereof (or the assets subject thereto), including with respect to intellectual property; and

(q) any encumbrances or restrictions of the type referred to in clauses (1), (2) and (3) above imposed by any amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings of the contracts, instruments or obligations referred to in clauses (a) through (p) above; *provided* that such amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings are, in the good faith judgment of the Issuer, not materially more restrictive with respect to such encumbrance and other restrictions taken as a whole than those prior to such amendment, modification, restatement, renewal, increase, supplement, refunding, replacement or refinancing.

For purposes of determining compliance with this covenant, (1) the priority of any Preferred Stock in receiving dividends or liquidating distributions prior to dividends or liquidating distributions being paid on common stock shall not be deemed a restriction on the ability to make distributions on Capital Stock and (2) the subordination of loans and advances made to the Issuer or a Restricted Subsidiary to other Indebtedness incurred by the Issuer or such Restricted Subsidiary shall not be deemed a restriction on the ability to make loans or advances.

Limitation on Guarantees of Indebtedness by Restricted Subsidiaries

The Issuer will not permit any Domestic Subsidiary that is a Wholly-Owned Subsidiary (and any Domestic Subsidiary that is a non-Wholly-Owned Subsidiary if such non-Wholly-Owned Subsidiary guarantees the Senior Credit Facilities or other capital markets debt securities of the Issuer or any Guarantor), other than a direct or indirect Domestic Subsidiary of a direct or indirect Subsidiary that is CFC, a FSHCO, a Guarantor or a Receivables Subsidiary, to guarantee the payment of (i) any Indebtedness under the Senior Credit Facilities, (ii) any Credit Facility permitted under clause (1) of the second paragraph under "—Limitation on Indebtedness and Issuance of Disqualified Stock and Preferred Stock" or (iii) capital markets debt securities of the Issuer or any other Guarantor in an aggregate principal amount in excess of $100.0 million unless such Subsidiary within 60 days executes and delivers a supplemental indenture to the Indenture providing for a Guarantee by such Subsidiary and joinders to the Security Documents or new Security Documents together with any filings and agreements required by the Security Documents to create or perfect the security interests for the benefit of the Holders in the Collateral of such Subsidiary; *provided* that this covenant shall not be applicable to any guarantee of any Restricted Subsidiary that existed at the time such Person became a Restricted Subsidiary and was not incurred in connection with, or in contemplation of, such Person becoming a Restricted Subsidiary. For the avoidance of doubt, no Excluded Subsidiary will be a Guarantor.

Each Guarantee shall be released in accordance with the provisions of the Indenture described under "—Guarantees."

Reports and Other Information

The Indenture will provide that so long as any Notes are outstanding, the Issuer will furnish to the Holders:

(1) (x) all annual and quarterly financial statements substantially in forms that would be required to be contained in a filing with the SEC on Forms 10-K and 10-Q of the Issuer, if the Issuer were required to file such forms, plus a "Management's Discussion and Analysis of Financial Condition and Results of Operations," (y) with respect to the annual and quarterly information, a presentation of Adjusted EBITDA of the Issuer substantially consistent with the presentation thereof in the Offering Circular and derived from such financial information, and (z) with respect to the annual financial statements only, a report on the annual financial statements by the Issuer's independent registered public accounting firm; and

(2) within 10 Business Days after the occurrence of an event required to be therein reported, such other information containing substantially the same information that would be required to be contained in filings with the SEC on Form 8-K under Items 1.01, 1.02, 1.03, 2.01, 2.05, 2.06, 4.01, 4.02, 5.01 and 5.02(b) and (c) (other than with respect to information otherwise required or contemplated by Item 402 of Regulation S-K promulgated by the SEC) as in effect on the Issue Date if the Issuer were required to file such reports; *provided*, *however*, that no such current report will be required to include as an exhibit, or to include a summary of the terms of, any employment or compensatory arrangement agreement, plan or understanding between the Issuer (or any of its Subsidiaries) and any director, member, partner, manager or executive officer, of the Issuer (or any of its Subsidiaries);

provided, *however*, that (i) in no event shall such financial statements or reports be required to comply with (x) Rule 3-10 of Regulation S-X promulgated by the SEC (or such other rule or regulation that amends, supplements or replaces such Rule 3-10, including for the avoidance of doubt, Rules 13-01 or 13-02 of Regulation S-X promulgated by the SEC), (x) Rule 3-09 of Regulation S-X (or such other rule or regulation that amends, supplements or replaces such Rule 3-09), (y) Rule 3-16 of Regulation S-X (or such other rule or regulation that amends, supplements or replaces such Rule 3-16 or (z) any requirement to otherwise include any schedules or separate financial statements of any of Subsidiaries of the Issuer or any Parent Entity, Affiliates or equity method investees, (ii) in no event shall

such financial statements or reports be required to comply with Regulation G under the Exchange Act or Item 10(e) of Regulation S-K promulgated by the SEC with respect to any non-GAAP financial measures contained therein, (iii) in no event shall such financial statements or reports be required to include any information that is not otherwise similar to information currently included in the Offering Circular, other than with respect to reports provided under clause (2) above, (iv) no such reports referenced under clause (2) above shall be required to be furnished if the Issuer determines in its good faith judgment that such event is not material to the Holders or the business, assets, operations or financial position of the Issuer and its Restricted Subsidiaries, taken as a whole, and (v) in no event shall reports referenced in clause (2) above be required to include as an exhibit copies of any agreements, financial statements or other items that would be required to be filed as exhibits to a current report on Form 8-K except for (x) agreements evidencing material Indebtedness and (y) historical and pro forma financial information to the extent reasonably available and, in any case with respect to such pro forma financial information, such pro forma financial information shall include only pro forma revenues, Consolidated EBITDA and capital expenditures in lieu thereof.

All such annual reports shall be furnished within 90 days after the end of the fiscal year to which they relate, and all such quarterly reports shall be furnished within 45 days after the end of the fiscal quarter to which they relate.

At any time that any of the Issuer's Subsidiaries are Unrestricted Subsidiaries and if any such Unrestricted Subsidiary or group of Unrestricted Subsidiaries, if taken together as one Subsidiary, would constitute a Significant Subsidiary of the Issuer, then the quarterly and annual financial information required by the preceding paragraph will include a reasonably detailed presentation, either (i) on the face of the financial statements or in the footnotes thereto, (ii) in "Management's Discussion and Analysis of Financial Condition and Results of Operations" or (iii) in any other comparable section, of the financial condition and results of operations of the Issuer and Restricted Subsidiaries separate from the financial condition and results of operations of such Unrestricted Subsidiaries of the Issuer.

The Issuer will make available such information and such reports (as well as the details regarding the conference call described below) to any Holder and, upon request, to any beneficial owner of the Notes, in each case by posting such information on its website, on Intralinks or any comparable password-protected online data system which will require a confidentiality acknowledgment, and will make such information readily available to any Holder, any bona fide prospective investor in the Notes, any securities analyst (to the extent providing analysis of investment in the Notes) or any market maker in the Notes who agrees to treat such information as confidential or accesses such information on Intralinks or any comparable password-protected online data system which will require a confidentiality acknowledgment; *provided* that the Issuer shall post such information thereon and make readily available any password or other login information to any such Holder, bona fide prospective investor, securities analyst or market maker; *provided*, *further*, *however*, that the Issuer may deny access to any competitively-sensitive information otherwise to be provided pursuant to this paragraph to any such Holder, prospective investor, security analyst or market maker that is a competitor of the Issuer and its Subsidiaries to the extent that the Issuer determines in good faith that the provision of such information to such Person would be competitively harmful to the Issuer and its Subsidiaries; and *provided*, *further*, that such Holders, bona fide prospective investors, security analysts or market makers shall agree to (i) treat all such reports (and the information contained therein) and information as confidential, (ii) not use such reports and the information contained therein for any purpose other than their investment or potential investment in the Notes and (iii) not publicly disclose any such reports (and the information contained therein).

So long as any Notes are outstanding, the Issuer (or a Parent Entity) will also:

(1) as promptly as reasonably practicable after furnishing to the Trustee each annual and quarterly report required by clause (1) of the first paragraph of this "Reports and Other Information" covenant or such earlier time after the completion of such reporting period, hold a conference call to discuss the results of operations for the relevant reporting period (which conference call, for the avoidance of doubt, may be held prior to such time that the annual or quarterly financial statements required by the first paragraph of this "Reports and Other Information" covenant for such reporting period are furnished to Holders so long as an earnings release for the applicable period has been furnished or otherwise made available to the Holders prior to the conference call) and may be the same as any call for the Issuer's or any Parent Entity's equity holders; and

(2) issue a press release to the appropriate nationally recognized wire services prior to the date of the conference call required to be held in accordance with clause (1) of this paragraph, announcing the time and date of such conference call and either including all information necessary to access the call or informing Holders, beneficial owners, prospective investors, market makers and securities analysts how they can obtain such information.

In addition, to the extent not satisfied by the foregoing, the Issuer shall furnish to prospective investors, upon their request, any information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act so long as the Notes are not freely transferable under the Securities Act.

The Indenture will permit the Issuer to satisfy its obligations in this "Reports and Other Information" covenant with respect to financial information relating to the Issuer by furnishing financial and other information relating to any Parent Entity instead of the Issuer; *provided* that to the extent such Parent Entity holds assets (other than its direct or indirect interest in the Issuer) that exceeds the lesser of (i) 1.0% of revenues of such Parent Entity and (ii) 1.0% of the total revenue for the preceding fiscal year of such Parent Entity, then such information related to such Parent Entity shall be accompanied by consolidating information, which may be unaudited, that explains in reasonable detail the differences between the information of such Parent Entity, on the one hand, and the information relating to the Issuer and its Subsidiaries on a stand-alone basis, on the other hand.

The Issuer will be deemed to have furnished the financial statements and other information referred to in clauses (1) and (2) of the first paragraph of this covenant if the Issuer or any Parent Entity has filed reports containing such information (or any such information of a Parent Entity in accordance with the immediately preceding paragraph) with the SEC.

To the extent any information is not provided within the time periods specified in this section "Reports and Other Information" and such information is subsequently provided, the Issuer will be deemed to have satisfied its obligations with respect thereto at such time and any Default with respect thereto shall be deemed to have been cured.

Maintenance of Listing

After the Issue Date, the Issuer will use commercially reasonable efforts to cause the Notes to be listed on the Official List of the Exchange and admitted to trading thereon, and to maintain such listing and admission so long as the Notes are outstanding; *provided* that, if (x) the Issuer is unable to list the Notes on the Official List of the Exchange, (y) maintenance of such listing becomes unduly onerous, as reasonably determined by the Issuer or (z) the Exchange requires additional financial information from the Issuer or any of its Restricted Subsidiaries in accordance with standards other than those accounting principles generally acceptable in the United States, then the Issuer will, prior to the delisting of the Notes from the Exchange (if then listed on the Official List of the Exchange), use all commercially reasonable efforts to obtain and maintain a listing of the Notes on another internationally "recognised stock exchange" (as defined in Section 1005 of the Income Tax Act 2007 of the United Kingdom) (in which case, references in this covenant to the Exchange will be deemed to be refer to such other "recognised stock exchange") that would not cause the Issuer or any of its Subsidiaries to become subject to Regulation (EU) No 596/2014 on market abuse (market abuse regulation) and any applicable delegated regulations thereunder.

Events of Default and Remedies

The Indenture will provide that each of the following events is an "*Event of Default*" with respect to the Notes under the Indenture:

(1) default in payment when due and payable, upon redemption, acceleration or otherwise, of principal of, or premium, if any, on the Notes;

(2) default for 30 days or more in the payment when due of interest on or with respect to the Notes;

(3) failure by the Issuer or any Subsidiary Guarantor for 60 days after receipt of written notice given by the Trustee or the Holders of not less than 30% in aggregate principal amount of the Notes then outstanding (with a copy to the Trustee) to comply with any of its obligations, covenants or agreements (other than a default referred to in clauses (1) or (2) above) contained in the Indenture or the Notes; *provided* that in the case of a failure to comply with the Indenture provisions described under "—Reports and Other Information," such period of continuance of such default or breach shall be 180 days after written notice described in this clause (3) has been given; *provided*, *further*, that no such notice may be given with respect to any action taken, and reported publicly or to the Holders, more than two years prior to such notice;

(4) default under any mortgage, indenture or instrument under which there is issued or by which there is secured or evidenced any Indebtedness for money borrowed by the Issuer or any Subsidiary Guarantor or the payment of which is guaranteed by the Issuer or any of any Subsidiary Guarantor (other than Indebtedness owed to the Issuer or a Restricted Subsidiary or any Permitted Receivables Financing), whether such Indebtedness or guarantee now exists or is created after the issuance of the Notes, if both:

(a) such default either results from the failure to pay any principal of such Indebtedness at its stated final maturity (after giving effect to any applicable grace periods) or relates to an obligation other than the obligation to pay principal of any such Indebtedness at its stated final maturity and results in the holder or holders of such Indebtedness causing such Indebtedness to become due prior to its stated final maturity; and

(b) the principal amount of such Indebtedness, together with the principal amount of any other such Indebtedness in default for failure to pay principal at stated final maturity (after giving effect to any applicable grace periods), or the maturity of which has been so accelerated, is in the aggregate, in excess of $300.0 million (or its foreign currency equivalent) at any one time outstanding;

(5) failure by the Issuer or any Significant Subsidiary (or group of Restricted Subsidiaries that together (as determined as of the most recent consolidated financial statements of the Issuer for a fiscal quarter end provided as required under "Certain Covenants—Reports and Other Information") would constitute a Significant Subsidiary) to pay final judgments aggregating in excess of $300.0 million (or its foreign currency equivalent) (to the extent not covered by insurance as to which the insurer has been notified of such judgment or order and has not denied its obligation), which final judgments remain unpaid, undischarged and unstayed for a period of more than 60 days after such judgment becomes final, and, in the event such judgment is covered by insurance, an enforcement proceeding has been commenced by any creditor upon such judgment or decree which is not promptly stayed;

(6) certain events of bankruptcy or insolvency with respect to the Issuer or any Significant Subsidiary (or group of Restricted Subsidiaries that together (as determined as of the most recent consolidated financial statements of the Issuer for a fiscal quarter end provided as required under "Certain Covenants—Reports and Other Information") would constitute a Significant Subsidiary);

(7) the Guarantee of any Subsidiary Guarantor that is a Significant Subsidiary (or group of Restricted Subsidiaries that together (as determined as of the most recent consolidated financial statements of the Issuer for a fiscal quarter end provided as required under "Certain Covenants—Reports and Other Information") would constitute a Significant Subsidiary) shall for any reason cease to be in full force and effect (except as contemplated by the terms of the Indenture) or be declared null and void or any responsible officer of any Subsidiary Guarantor that is a Significant Subsidiary (or the responsible officers of any group of Restricted Subsidiaries that together (as determined as of the most recent consolidated financial statements of the Issuer for a fiscal quarter end provided as required under "Certain Covenants—Reports and Other Information") would constitute a Significant Subsidiary), as the case may be, denies in writing that it has any further liability under its Guarantee or gives written notice to such effect, other than by reason of the satisfaction in full of all obligations under the Indenture and discharge of the Indenture or the release of any such Guarantee in accordance with the Indenture; or

(8) other than by reason of the satisfaction in full of all obligations under the Indenture and discharge of the Indenture with respect to the Notes or the release of such Collateral with respect to the Notes in accordance with the terms of the Indenture and the Security Documents,

(a) in the case of any security interest with respect to Collateral having a fair market value in excess of 5.0% of Total Assets, individually or in the aggregate, such security interest under the Security Documents shall, at any time, cease to be a valid and perfected security interest or shall be declared invalid or unenforceable and any such default continues for 30 days after notice of such default shall have been given to the Issuer by the Trustee or the Holders of at least 30% of the aggregate principal amount of the then outstanding Notes issued under the Indenture, except to the extent that any such default (A) results from the failure of the Notes Collateral Agent to maintain possession of certificates, promissory notes or other instruments actually delivered to it representing securities pledged under the Security Documents or (B) to the extent relating to Collateral consisting of real property, is covered by a title insurance policy with respect to such real property and such insurer has not denied coverage;

(b) the Issuer or any Subsidiary Guarantor that is a Significant Subsidiary (or any group of Subsidiary Guarantors that, taken together, would constitute a Significant Subsidiary) shall assert, in any pleading in any court of competent jurisdiction, that any security interest under any Security Document is invalid or unenforceable; or

(c) the Liens created by the Security Documents shall at any time not constitute a valid and perfected Lien on any material portion of the Collateral intended to be covered thereby (unless perfection is not required by the Indenture or the Security Documents) other than (i)(A) in accordance with the terms of the relevant Security Document and the Indenture, (B) the satisfaction in full of all Obligations under the Indenture or (C) any loss of perfection that results from the failure of the Notes Collateral Agent to maintain possession of certificates delivered to it representing securities pledged under the Security Documents and (ii) such default continues for 30 days after notice of such default shall have been given to the Issuer by the Trustee or the Holders of at least 30% of the principal amount of the then outstanding Notes issued under the Indenture.

If any Event of Default (other than of a type specified in clause (6) above) occurs and is continuing under the Indenture, the Trustee or the Holders of at least 30% in aggregate principal amount of the then total outstanding Notes may declare the principal, premium, if any, interest and any other monetary obligations on all the then outstanding Notes to be due and payable immediately.

Upon the effectiveness of such declaration, such principal and interest will be due and payable immediately. Notwithstanding the foregoing, in the case of an Event of Default arising under clause (6) of the first paragraph of this section with respect to the Issuer, all outstanding Notes will become due and payable without further action or notice. If a Default occurs and is continuing and is actually known to the Trustee, the Trustee must send to each Holder notice of the Default within 90 days after it is known to the Trustee. The Indenture will provide that the Trustee shall not have knowledge or notice of an Event of Default, unless it shall have received written notice thereof. The Indenture will provide further that the Trustee may withhold from the Holders notice of any continuing Default, except a Default relating to the payment of principal, premium, if any, or interest, if it in good faith determines that withholding notice is in their interest. In addition, the Trustee shall have no obligation to accelerate the Notes if in the judgment of the Trustee acceleration is not in the best interest of the Holders.

The Indenture will provide that the Holders of a majority in aggregate principal amount of the then outstanding Notes by notice to the Trustee may on behalf of the Holders of all of the Notes waive any existing Default or Event of Default and its consequences under the Indenture (except a continuing Default or Event of Default in the payment of interest on, premium, if any, or the principal of any Note held by a non-consenting Holder) and rescind any acceleration and its consequences with respect to the Notes; *provided* such rescission would not conflict with any judgment of a court of competent jurisdiction. In the event of any Event of Default specified in clause (4) above, such Event of Default and all consequences thereof (excluding any resulting payment default,

other than as a result of acceleration of the Notes) shall be annulled, waived and rescinded, automatically and without any action by the Trustee or the Holders, if within 20 days after such Event of Default arose:

(1) the Indebtedness or guarantee that is the basis for such Event of Default has been discharged; or

(2) the requisite holders thereof have rescinded or waived the acceleration, notice or action (as the case may be) giving rise to such Event of Default; or

(3) the default that is the basis for such Event of Default has been cured.

The Trustee will be under no obligation to exercise any of the rights or powers under the Indenture at the request or direction of any of the Holders unless the Holders have offered to the Trustee indemnity or security reasonably satisfactory to the Trustee against any loss, liability or expense. Subject to the First Lien Intercreditor Agreement, except to enforce the right to receive payment of principal, premium (if any) or interest when due, no Holder of a Note may pursue any remedy with respect to the Indenture or the Notes unless:

(1) such Holder has previously given the Trustee written notice that an Event of Default is continuing;

(2) Holders of at least 30% in aggregate principal amount of the total outstanding Notes have requested the Trustee in writing to pursue the remedy;

(3) Holders have offered and, if requested, provided to the Trustee indemnity or security reasonably satisfactory to the Trustee against any loss, liability or expense;

(4) the Trustee has not complied with such request within 60 days after the receipt thereof and the offer of security or indemnity; and

(5) Holders of a majority in aggregate principal amount of the total then outstanding Notes have not given the Trustee a direction inconsistent with such request within such 60-day period.

Subject to the First Lien Intercreditor Agreement and certain other restrictions, under the Indenture the Holders of a majority in aggregate principal amount of the outstanding Notes will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee. The Trustee, however, may refuse to follow any direction that conflicts with law or the Indenture or that the Trustee determines is unduly prejudicial to the rights of any other Holder or that would involve the Trustee in personal liability.

Any notice of Default, notice of acceleration or instruction to a responsible officer of the Trustee to provide a notice of Default, notice of acceleration or take any other action (a "*Noteholder Direction*") provided by any one or more Holders of Notes, other than a Regulated Bank (each a "*Directing Holder*") must be accompanied by a written representation from each such Holder to the Issuer and a responsible officer of the Trustee that such Holder is not (or, in the case such Holder is Euroclear or Clearstream or their respective nominees, that such Holder is being instructed solely by beneficial owners that are not) Net Short (a "*Position Representation*"), which representation, in the case of a Noteholder Direction relating to a notice of Default shall be deemed repeated at all times until the resulting Event of Default is cured or otherwise ceases to exist or the Notes are accelerated. In addition, each Directing Holder must, at the time of providing a Noteholder Direction, covenant to provide the Issuer with such other information as the Issuer may reasonably request from time to time in order to verify the accuracy of such Holder's Position Representation within five Business Days of request therefor (a "Verification Covenant"). In any case in which the Holder is Euroclear or Clearstream or their respective nominees, any Position Representation or Verification Covenant required hereunder shall be provided by the beneficial owner of such Notes in lieu of Euroclear or Clearstream or their respective nominees.

If, following the delivery of a Noteholder Direction, but prior to the acceleration of the Notes, the Issuer determines in good faith that there is a reasonable basis to believe that a Directing Holder was, at any relevant time, in breach of its Position Representation and provides to the Trustee an Officer's Certificate stating that the Issuer has initiated litigation in a court of competent jurisdiction seeking a determination that such Directing Holder was, at such time, in breach of its Position Representation, and seeking to invalidate any Event of Default that resulted from the applicable Noteholder Direction, the cure period with respect to such Default shall be automatically stayed pending a final and non-appealable determination of a court of competent jurisdiction on such matter. If, following the delivery of a Noteholder Direction, but prior to the acceleration of the Notes, the Issuer provides to the Trustee an Officer's Certificate that a Directing Holder failed to satisfy its Verification Covenant, the cure period with respect to such Default shall be automatically stayed and the cure period with respect to any Event of Default that resulted from the applicable Noteholder Direction shall be automatically reinstituted and any remedy stayed pending satisfaction of such Verification Covenant. Any breach of the Position Representation shall result in such Holder's participation in such Noteholder Direction being disregarded; and, if, without the participation of such Holder, the percentage of the Notes held by the remaining Holders that provided such Noteholder Direction would have been insufficient to validly provide such Noteholder Direction, such Noteholder Direction shall be void ab initio, with the effect that such Event of Default with respect to the Notes shall be deemed never to have occurred, acceleration voided and the Trustee shall be deemed not to have received such Noteholder Direction or any notice of such Default or Event of Default.

Notwithstanding anything in the preceding two paragraphs to the contrary, any Noteholder Direction delivered to the Trustee during the pendency of an Event of Default as the result of a bankruptcy or similar proceeding shall not require compliance with the foregoing paragraphs. In addition, for the avoidance of doubt, the foregoing paragraphs shall not apply to any Holder that is a Regulated Bank.

For the avoidance of doubt, the Trustee shall be entitled to conclusively rely on any Noteholder Direction, Position Representation, Verification Covenant, Officer's Certificate or other document delivered to it in accordance with the Indenture, shall have no duty to inquire as to or investigate the accuracy of any Position Representation, enforce compliance with any Verification Covenant, verify any statements in any Officer's Certificate delivered to it, or otherwise make calculations, investigations or determinations with respect to Regulated Banks, Derivative Instruments, Net Shorts, Long Derivative Instruments, Short Derivative Instruments or otherwise and shall have no liability for ceasing to take any action or staying any remedy. The Trustee shall have no liability to the Issuer, any Holder or any other Person in acting in good faith on a Noteholder Direction or to determine whether any Holder has delivered a Position Representation or that such Position Representation conforms with the Indenture or any other agreement, or whether or not any holder is a Regulated Bank.

The Indenture will provide that the Issuer is required to deliver to the Trustee annually a statement regarding compliance with the Indenture, and the Issuer is required, within fifteen Business Days, upon becoming aware of any Default, to deliver to the Trustee a statement specifying such Default.

No Personal Liability of Directors, Managers, Officers, Members, Partners, Employees and Stockholders

No past, present or future director, manager, officer, employee, incorporator, member, partner or stockholder of the Issuer or any Guarantor or any of their parent companies or entities shall have any liability for any obligations of the Issuer or the Guarantors under the Notes, the Guarantees, the Security Documents or the Indenture or for any claim based on, in respect of, or by reason of such obligations or their creation. Each Holder by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes. Such waiver may not be effective to waive liabilities under the federal securities laws and it is the view of the SEC that such a waiver is against public policy.

Legal Defeasance and Covenant Defeasance

The obligations of the Issuer and the Guarantors under the Indenture and the Notes or the Guarantees, as the case may be, will terminate (other than certain obligations) and will be released upon payment in full of all of the Notes issued under the Indenture. The Issuer may, at its option and at any time, elect to have all of its obligations discharged with respect to the Notes and have each Guarantor's obligation discharged with respect to its Guarantee

and have Liens on the Collateral securing the Notes released ("*Legal Defeasance*") and cure all then existing Events of Default except for:

(1) the rights of Holders to receive payments in respect of the principal of, premium, if any, and interest on the Notes when such payments are due solely out of the trust created pursuant to the Indenture;

(2) the Issuer's obligations with respect to Notes concerning issuing temporary Notes, registration of such Notes, mutilated, destroyed, lost or stolen Notes and the maintenance of an office or agency for payment and money for security payments held in trust;

(3) the rights, powers, trusts, duties and immunities of the Trustee and the Notes Collateral Agent, and the Issuer's obligations in connection therewith; and

(4) the Legal Defeasance provisions of the Indenture.

In addition, the Issuer may, at its option and at any time, elect to have its obligations and those of each Guarantor released with respect to substantially all of the restrictive covenants that are described in the Indenture, the Notes and its Guarantee, as applicable ("*Covenant Defeasance*"), and thereafter any omission to comply with such obligations shall not constitute a Default or Event of Default with respect to the Notes. In the event Covenant Defeasance occurs, certain events (not including bankruptcy, receivership, rehabilitation and insolvency events pertaining to the Issuer) described under "—Events of Default and Remedies" will no longer constitute an Event of Default with respect to the Notes.

In order to exercise either Legal Defeasance or Covenant Defeasance with respect to the Notes:

(1) the Issuer must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders of Notes, cash in euros, Government Securities, or a combination thereof, in each case, in such amounts (including scheduled payments thereon) as will be sufficient (without consideration of any reinvestment of interest), in the opinion of an Independent Financial Advisor, to pay the principal of, premium, if any, and interest due on the Notes on the stated maturity date or on the Redemption Date, as the case may be, of such principal, premium, if any, or interest on such Notes and the Issuer must specify whether such Notes are being defeased to maturity or to a particular Redemption Date; *provided* that, upon any redemption that requires the payment of the Applicable Premium, the amount deposited shall be sufficient for purposes of the Indenture to the extent that an amount is deposited with the Trustee equal to the Applicable Premium calculated as of the date of the notice of redemption, with any deficit as of the date of redemption (any such amount, the "*Applicable Premium Deficit*") only required to be deposited with the Trustee on or prior to the date of redemption. Any Applicable Premium Deficit shall be set forth in an Officer's Certificate delivered to the Trustee simultaneously with the deposit of such Applicable Premium Deficit that confirms that such Applicable Premium Deficit shall be applied toward such redemption

(2) in the case of Legal Defeasance, the Issuer shall have delivered to the Trustee an Opinion of Counsel reasonably acceptable to the Trustee confirming that, subject to customary assumptions and exclusions,

(a) the Issuer has received from, or there has been published by, the U.S. Internal Revenue Service a ruling, or

(b) since the Issue Date, there has been a change in the applicable U.S. federal income tax law,

in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, subject to customary assumptions and exclusions, the Holders will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such Legal Defeasance and will be subject to U.S. federal income tax on

the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;

(3) in the case of Covenant Defeasance, the Issuer shall have delivered to the Trustee an Opinion of Counsel reasonably acceptable to the Trustee confirming that, subject to customary assumptions and exclusions, the Holders will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such Covenant Defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;

(4) no Default (other than that resulting from borrowing funds to be applied to make such deposit and any similar and simultaneous deposit relating to other Indebtedness, and, in each case the granting of Liens in connection therewith) shall have occurred and be continuing on the date of such deposit;

(5) such Legal Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under any material agreement or material instrument (other than the Indenture) to which, the Issuer or any Guarantor is a party or by which the Issuer or any Guarantor is bound (other than that resulting from borrowing funds to be applied to make such deposit and any similar and simultaneous deposit relating to other Indebtedness and, in each case, the granting of Liens in connection therewith);

(6) the Issuer shall have delivered to the Trustee an Officer's Certificate stating that the deposit was not made by the Issuer with the intent of defeating, hindering, delaying or defrauding any creditors of the Issuer or any Guarantor or others; and

(7) the Issuer shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel (which Opinion of Counsel may be subject to customary assumptions and exclusions) each stating that all conditions precedent provided for or relating to the Legal Defeasance or the Covenant Defeasance, as the case may be, have been complied with.

Satisfaction and Discharge

The Indenture will be discharged and will cease to be of further effect as to all Notes, the Guarantees and the Liens on the Collateral securing the Notes will be released, when either:

(1) all Notes theretofore authenticated and delivered, except mutilated, lost, stolen or destroyed Notes which have been replaced or paid and Notes for whose payment money has theretofore been deposited in trust, have been delivered to the Trustee for cancellation; or

(2) (a) all Notes not theretofore delivered to the Trustee for cancellation (i) have become due and payable by reason of the making of a notice of redemption or otherwise, (ii) will become due and payable within one year or (iii) are to be called for redemption within one year under arrangements reasonably satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Issuer and the Issuer or any Guarantor have irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust solely for the benefit of the Holders of Notes, cash in euros, Government Securities or a combination thereof, in each case, in such amounts (including scheduled payments thereon) as will be sufficient (without consideration of any reinvestment of interest) to pay and discharge the entire indebtedness on the Notes not theretofore delivered to the Trustee for cancellation for principal, premium, if any, and accrued interest to the date of maturity or redemption; *provided* that, upon any redemption that requires the payment of the Applicable Premium, the amount deposited shall be sufficient for purposes of the Indenture to the extent that an amount is deposited with the Trustee equal to the Applicable Premium calculated as of the date of the notice of redemption, with any Applicable Premium Deficit only required to be deposited with the Trustee on or prior to the date of redemption. Any Applicable Premium Deficit shall be set forth in an Officer's Certificate delivered to the Trustee

simultaneously with the deposit of such Applicable Premium Deficit that confirms that such Applicable Premium Deficit shall be applied toward such redemption;

(b) no Default (other than that resulting from borrowing funds to be applied to make such deposit or any similar and simultaneous deposit relating to other Indebtedness and, in each case, the granting of Liens in connection therewith) with respect to the Indenture or the Notes shall have occurred and be continuing on the date of such deposit or shall occur as a result of such deposit and such deposit will not result in a breach or violation of, or constitute a default under any material agreement or material instrument (other than the Indenture) to which the Issuer or any Guarantor is a party or by which the Issuer or any Guarantor is bound (other than that resulting from borrowing funds to be applied to make such deposit and any similar and simultaneous deposit relating to other Indebtedness and, in each case, the granting of Liens in connection therewith);

(c) the Issuer has paid or caused to be paid all sums payable by it under the Indenture; and

(d) the Issuer has delivered irrevocable instructions to the Trustee to apply the deposited money toward the payment of the Notes at maturity or the Redemption Date, as the case may be.

In addition, the Issuer must deliver an Officer's Certificate and an Opinion of Counsel (which Opinion of Counsel may be subject to customary assumptions and exclusions) to the Trustee stating that all conditions precedent to satisfaction and discharge have been satisfied.

Amendment, Supplement and Waiver

Except as provided in the next two succeeding paragraphs, the Indenture, the Security Documents, the Notes and any Guarantee may be amended or supplemented and any existing Default or Event of Default or compliance with any provision of the Indenture, the Security Documents, the Notes or any Guarantee may be waived, in each case, with the consent of the Holders of at least a majority in aggregate principal amount of the then outstanding Notes, other than Notes beneficially owned by the Issuer or its Affiliates, including consents or waivers obtained in connection with a purchase of, or tender offer or exchange offer for the Notes.

The Indenture will provide that, without the consent of each affected Holder, an amendment, supplement or waiver may not, with respect to any Notes held by a non-consenting Holder:

(1) reduce the principal amount of such Notes whose Holders must consent to an amendment, supplement or waiver;

(2) reduce the principal of or change the fixed final maturity of any such Note (other than provisions relating to a Change of Control and Asset Sales) or reduce the premium payable upon the redemption of such Notes or change the time at which such Notes may be redeemed as described under "— Optional Redemption;" *provided* that any amendment to the minimum notice requirement may be made with the consent of the Holders of a majority in aggregate principal amount of the Notes then outstanding;

(3) reduce the rate of or change the time for payment of interest on any Note;

(4) waive a Default or Event of Default in the payment of principal of or premium, if any, or interest on the Notes, except a rescission of acceleration of the Notes by the Holders of at least a majority in aggregate principal amount of the outstanding Notes and a waiver of the payment default that resulted from such acceleration, or in respect of a covenant or provision contained in the Indenture or any Guarantee which cannot be amended or modified without the consent of all affected Holders;

(5) make any Note payable in money other than that stated therein;

(6) make any change in the provisions of the Indenture relating to waivers of past Defaults or the rights of Holders to receive payments of principal of or premium, if any, or interest on the Notes;

(7) make any change in these amendment and waiver provisions;

(8) amend the contractual right expressly set forth in the Indenture or any Note of any Holder to institute suit for the enforcement of any payment of principal, premium, if any, and interest on such Holder's Notes on or after the due dates therefor;

(9) make any change to or modify the ranking of the Notes or the Guarantees that would adversely affect the Holders; or

(10) except as expressly permitted by the Indenture, modify the Guarantees of any Significant Subsidiary in any manner materially adverse to the Holders.

Notwithstanding the foregoing, without the consent of the Holders of at least 66-2/3% in aggregate principal amount of the Notes then outstanding, no amendment or waiver may (A) make any change in any Security Document or the provisions in the Indenture dealing with Collateral or application of trust proceeds of the Collateral with the effect of releasing the Liens on all or substantially all of the Collateral which secure the Obligations in respect of the Notes or (B) change or alter the priority of the Liens securing the Obligations in respect of the Notes in any material portion of the Collateral in any way adverse to the Holders in any material respect, other than, in each case, as provided under the terms of the Security Documents or the First Lien Intercreditor Agreement.

Notwithstanding the foregoing, the Issuer, any Guarantor (with respect to its Guarantee or the Indenture to which it is a party), the Trustee and/or the Notes Collateral Agent may amend or supplement the Indenture, the Security Documents, the Notes and any Guarantee without the consent of any Holder:

(1) to cure any ambiguity, omission, mistake, defect or inconsistency;

(2) to provide for uncertificated Notes in addition to or in place of certificated Notes or to alter the provisions of the Indenture relating to the form of the Notes (including the related definitions) in a manner that does not materially adversely affect any Holder;

(3) to comply with the covenant described under "Certain Covenants—Merger, Consolidation, Amalgamation or Sale of All or Substantially All Assets;"

(4) to provide for the assumption of the Issuer's or any Guarantor's obligations to the Holders pursuant to the terms of the Indenture and the Notes;

(5) to make any change that would provide any additional rights or benefits to the Holders or that does not adversely affect the legal rights under the Indenture of any such Holder in any material respect;

(6) to add covenants for the benefit of the Holders or to surrender any right or power conferred upon the Issuer or any Guarantor;

(7) to provide for the issuance of Additional Notes in accordance with the terms of the Indenture;

(8) to comply with requirements of the SEC in order to effect or maintain the qualification of the Indenture under the Trust Indenture Act of 1939, as amended, if applicable;

(9) to evidence and provide for the acceptance and appointment under the Indenture of a successor Trustee, a successor Notes Collateral Agent or any successor paying agent thereunder pursuant to the requirements thereof;

(10) to add a Guarantor, a guarantee of a Parent Entity, or a co-obligor of the Notes under the Indenture and/or the Security Documents;

(11) to conform the text of the Indenture, the Security Documents, the Notes or the Guarantees to any provision of this "Description of Notes" to the extent that such provision in this "Description of Notes" was intended to be a verbatim recitation of a provision of the Indenture, the Security Documents, the Notes or the Guarantees;

(12) to make any amendment to the provisions of the Indenture relating to the transfer and legending of Notes as permitted by the Indenture, including, without limitation, to facilitate the issuance and administration of the Notes; *provided*, *however*, that such amendment does not materially and adversely affect the rights of Holders to transfer Notes;

(13) to release any Guarantor from its Guarantee pursuant to the Indenture when permitted or required by the Indenture;

(14) to release any Collateral from the Lien securing the Notes when permitted or required by the Indenture (including pursuant to the second paragraph under "Certain Covenants—Liens") or the Security Documents;

(15) to comply with the rules of any applicable securities depositary;

(16) to mortgage, pledge, hypothecate or grant any other Lien in favor of the Trustee for the benefit of the Holders, as additional security for the payment and performance of all or any portion of the First Lien Notes Obligations, in any property or assets, including any which are required to be mortgaged, pledged or hypothecated, or in which a Lien is required to be granted to or for the benefit of the Trustee or the Collateral Agent pursuant to the Indenture, any of the Security Documents or otherwise;

(17) to add Additional First Lien Secured Parties to any Security Documents;

(18) to enter into any intercreditor agreement having substantially similar terms with respect to the Holders as those set forth in the First Lien Intercreditor Agreement, taken as a whole, or any joinder thereto;

(19) to add Collateral with respect to any or all of the Notes and/or the related Guarantees;

(20) with respect to the Security Documents and the First Lien Intercreditor Agreement to the extent such documents provide that they can be amended without consent of the Holders;

(21) to enter into any other Intercreditor Agreement (as defined in the Senior Credit Facilities) to the extent contemplated hereby and with such changes as contemplated above or any joinder thereto; and

(22) in the case of any Security Document, to include therein any legend required to be set forth therein pursuant to the First Lien Intercreditor Agreement or to modify any such legend as required by the First Lien Intercreditor Agreement.

The consent of the Holders is not necessary under the Indenture or the Notes to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment.

Notices

Notices given by publication (including posting of information as contemplated by the Indenture provisions described under "Certain Covenants—Reports and Other Information") will be deemed given on the first date on which publication is made, notices given by first-class mail, postage prepaid, will be deemed given five calendar days after mailing or transmitting, notices sent by overnight delivery service will be deemed given when delivered

and notices given electronically will be deemed given when sent. Notice given in accordance with the procedures of Euroclear or Clearstream will be deemed given on the date sent to Euroclear or Clearstream.

Concerning the Trustee and the Notes Collateral Agent

The Indenture will contain certain limitations on the rights of the Trustee and the Notes Collateral Agent, should it become a creditor of the Issuer or a Guarantor, to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim as security or otherwise. The Trustee and the Notes Collateral Agent will be permitted to engage in other transactions; however, if it acquires any conflicting interest (as defined in the Indenture) it must eliminate such conflict within 90 days or resign as Trustee.

The Indenture will provide that the Holders of a majority in aggregate principal amount of the then outstanding Notes will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or Notes Collateral Agent, as applicable, subject to certain exceptions. The Indenture will provide that at all times that an Event of Default has occurred and is continuing, the Trustee shall exercise such of the rights and powers vested in it under the Indenture, and use the same degree of care of and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of his or her own affairs. Neither the Trustee nor the Notes Collateral Agent will be under any obligation to exercise any of their rights or powers under the Indenture at the request of any Holder, unless such Holder shall have offered to the Trustee and the Notes Collateral Agent security or indemnity reasonably satisfactory to them against any loss, liability or expense with respect to such exercise. Subject to receipt of satisfactory security, indemnity and other such evidence as they deem appropriate upon which to rely, the Trustee and the Notes Collateral Agent shall enter into the Security Documents, the First Lien Intercreditor Agreement, the Second Lien Intercreditor Agreement, if any, any intercreditor agreement having substantially similar terms with respect to the Holders as those set forth in the First Lien Intercreditor Agreement, taken as a whole, or any joinder thereto and any other Intercreditor Agreement (as defined in the Senior Credit Facilities) or any joinder thereto upon the request of the Issuer and the Guarantors.

By their acceptance of the Notes, the Holders of the Notes will be deemed to have authorized the Notes Collateral Agent to enter into and to perform each of the Security Documents and the First Lien Intercreditor Agreement, including any amendments or supplements thereto permitted by the Indenture.

Governing Law

The Indenture, the Notes and the Guarantees will be governed by, and construed in accordance with, the laws of the State of New York.

Limited Condition Acquisition and Specified Transaction

When calculating the availability under any basket, ratio or any financial metric under the Indenture or compliance with any provision of the Indenture (including the absence of defaults of Events of Default), in each case in connection with (a) any Limited Condition Acquisition, (b) any incurrence or issuance of or repayment, redemption, repurchase or refinancing of Indebtedness, Disqualified Stock or Preferred Stock, (c) the creation of Liens, (d) the making of any Asset Sale or any disposition excluded from the definition of "Asset Sale", or (e) the making of an Investment (including any acquisition) (the transactions referred to in clauses (b) through (e), collectively, the "*Specified Transactions*," and each, a "*Specified Transaction*") and any actions or transactions related thereto, the date of determination of such basket, ratio or financial metric or whether the Limited Condition Acquisition or any such Specified Transaction is permitted (or any requirement or conditions therefor is complied with or satisfied (including as to the absence of any Default or Event of Default)) may, at the option of the Issuer, any of its Restricted Subsidiaries, a Parent Entity of the Issuer, any successor entity of any of the foregoing (including a third party) (the "*Testing Party*") (which election may be made on or prior to the date of consummation of such Limited Condition Acquisition or Specified Transaction), be the date the definitive agreements for such Limited Condition Acquisition or Specified Transaction are entered into (or, if applicable, the date of delivery of a binding offer or launch of a "certain funds" tender offer), the date of the announcement of such Limited Condition Acquisition or Specified Transaction, or the date that a notice, which may be conditional, of repayment or redemption in connection with a repayment, redemption, repurchase or refinancing of Indebtedness, Disqualified

Stock or Preferred Stock is given to the holders of such Indebtedness, Disqualified Stock or Preferred Stock (any such date, the "*Transaction Test Date*") and such baskets, ratios or financial metrics shall be calculated with such pro forma adjustments as are appropriate and consistent with the pro forma adjustment provisions set forth in the definitions of Fixed Charge Coverage Ratio, Consolidated First Lien Debt Ratio, Consolidated Total Debt Ratio and Consolidated Secured Debt Ratio after giving effect to such Limited Condition Acquisition or Specified Transactions and any actions or transactions to be entered into in connection therewith (including any incurrence of Liens, Indebtedness and the use of proceeds thereof) as if they occurred at the beginning of the applicable period for purposes of determining the ability to consummate any such Limited Condition Acquisition or Specified Transaction, and, for the avoidance of doubt, (x) if any of such baskets, ratios or financial metrics are exceeded or are not complied with as a result of fluctuations in such basket, ratio or related financial metrics (including due to fluctuations in Fixed Charges, Consolidated Net Income or Consolidated EBITDA of the Issuer, the target company or the Person that is otherwise the subject of the Limited Condition Acquisition or the Specified Transaction during and after the Applicable Measurement Period) at or prior to the consummation of the relevant Limited Condition Acquisition or Specified Transaction and any actions or transactions related thereto, such baskets, ratios or financial metrics will not be deemed to have been exceeded as a result of such fluctuations and (y) such baskets, ratios or financial metrics shall not be tested at the time of consummation of such Limited Condition Acquisition or Specified Transaction and any actions or transactions related thereto except as contemplated in clause (a) of the immediately succeeding proviso; *provided*, *however*, that (a) if financial statements for one or more subsequent fiscal quarters shall have become available, the Testing Party may elect, in its sole discretion, to re-determine all such baskets, ratios and financial metrics on the basis of such financial statements, in which case such date of redetermination shall thereafter be deemed to be the applicable Transaction Test Date for purposes of such baskets, ratios and financial metrics, (b) if any ratios or financial metrics improve or baskets increase as a result of such fluctuations, such improved ratios, financial metrics or baskets may be utilized, (c) if the Testing Party elects to have such determinations occur at the Transaction Test Date, any such transactions (including the Limited Condition Acquisition or Specified Transaction and any actions or transactions related thereto) shall be deemed to have occurred on the Transaction Test Date and to be outstanding thereafter for purposes of calculating any baskets, ratios or financial metrics under the Indenture after the Transaction Test Date and before the consummation of such Limited Condition Acquisition or Specified Transaction unless and until such Limited Condition Acquisition or Specified Transaction has been abandoned, as determined by the Testing Party, prior to the consummation thereof and (d) Consolidated Interest Expense for purposes of the Fixed Charge Coverage Ratio will be calculated using an assumed interest rate based on the indicative interest margin, as reasonably determined by the Testing Party in good faith. For the avoidance of doubt, if the Testing Party has exercised its option pursuant to the foregoing and any Default or Event of Default occurs following the Transaction Test Date (including any new Transaction Test Date) for the applicable Limited Condition Acquisition or Specified Transaction and prior to or on the date of the consummation of such Limited Condition Acquisition or Specified Transaction, any such Default or Event of Default shall be deemed to not have occurred or be continuing for purposes of determining whether any action being taken in connection with such Limited Condition Acquisition or Specified Transaction is permitted under the Indenture.

Certain Compliance Determinations

The Indenture shall provide that any calculation or measure that is determined with reference to the Issuer's financial statements (including, without limitation, Applicable Measurement Period, Consolidated EBITDA, Consolidated First Lien Debt Ratio, Consolidated Interest Expense, Consolidated Net Income, Consolidated Secured Debt Ratio, Consolidated Total Debt Ratio, Fixed Charge Coverage Ratio, Fixed Charges, Permitted Receivables Financing, Total Assets and clause (3)(a) of the first paragraph under "—Limitation on Restricted Payments") may be determined with reference to the financial statements of a Parent Entity of the Issuer instead so long as such Parent Entity does not hold any material assets other than, directly or indirectly, the Equity Interests of the Issuer (as determined in good faith by the Board or senior management of the Issuer), with reference to, if necessary in the good faith determination of the Board or senior management of the Issuer, any information delivered pursuant to the proviso in the seventh paragraph under "Certain Covenants—Reports and Other Information."

The Indenture shall also provide that, for purposes of determining any calculation or measure as of any Applicable Calculation Date, date of determination or Transaction Test Date (including, without limitation, Consolidated EBITDA, Consolidated First Lien Debt Ratio, Consolidated Interest Expense, Consolidated Net Income, Consolidated Secured Debt Ratio, Consolidated Total Debt Ratio, Fixed Charge Coverage Ratio, Fixed

Charges, Permitted Receivables Financing and Total Assets) under the Indenture, the U.S. dollar equivalent amount of any amount denominated in a foreign currency shall be calculated, to the extent not already reflected in U.S. dollars in the relevant financial statements (which may be internal), based on the relevant currency exchange rate in effect as of the end of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Applicable Calculation Date.

Notwithstanding anything to the contrary herein, in the event an item of Indebtedness, Disqualified Stock or Preferred Stock (or any portion thereof) is incurred or issued, any Lien is incurred or other transaction is undertaken in reliance on a provision in any covenant (including any constituent definition thereof) of the Indenture that does not require compliance with a financial ratio or test (including, without limitation, any Fixed Charge Coverage Ratio, Consolidated First Lien Debt Ratio, Consolidated Secured Debt Ratio or Consolidated Total Debt Ratio test (any such amounts, the "*Fixed Amounts*") substantially concurrently with any such amounts incurred or transactions undertaken in reliance on a provision of the Indenture that requires compliance with a financial ratio or test (including, without limitation, any Fixed Charge Coverage Ratio, Consolidated First Lien Debt Ratio, Consolidated Secured Debt Ratio or Consolidated Total Debt Ratio test) (any such amounts, the "*Incurrence-Based Amounts*"), it is understood and agreed that the Fixed Amounts shall be disregarded in the calculation of the financial ratio or test applicable to the Incurrence-Based Amounts (but any such calculation, for the avoidance of doubt, shall give full pro forma effect to all applicable and related transactions, including (but subject to the foregoing) any incurrence and repayments of Indebtedness and all other permitted pro forma adjustments).

Notwithstanding anything in the Indenture to the contrary, in the event an item of Indebtedness, Disqualified Stock or Preferred Stock (or any portion thereof) is incurred or issued, any Lien is incurred or other transaction is undertaken in reliance of a ratio basket based on the Fixed Charge Coverage Ratio, Consolidated First Lien Debt Ratio, Consolidated Secured Debt Ratio or Consolidated Total Debt Ratio, such ratio(s) shall be calculated without regard to the incurrence of any Indebtedness under any revolving facility or letter of credit facility (1) immediately prior to or in connection therewith or (2) used to finance working capital needs of the Issuer, its Restricted Subsidiaries and any Parent Entity (as reasonably determined by the Issuer).

Certain Definitions

Set forth below are certain defined terms to be used in the Indenture. For purposes of the Indenture, unless otherwise specifically indicated, the term "consolidated" with respect to any Person refers to such Person on a consolidated basis in accordance with GAAP, but excluding from such consolidation any Unrestricted Subsidiary as if such Unrestricted Subsidiary were not an Affiliate of such Person.

"*Acquired Indebtedness*" means, with respect to any specified Person,

(1) Indebtedness of any other Person existing at the time such other Person is merged, consolidated or amalgamated with or into or became a Restricted Subsidiary of such specified Person, including Indebtedness incurred in connection with, or in contemplation of, such other Person merging, consolidating or amalgamating with or into or becoming a Restricted Subsidiary of such specified Person, and

(2) Indebtedness secured by a Lien encumbering any asset acquired by such specified Person.

"*Advance Offer*" has the meaning set forth under "Repurchase at the Option of Holders—Asset Sales."

"*Additional First Lien Obligation*" means any Indebtedness having Pari Passu Lien Priority relative to the Notes with respect to the Collateral (other than the Senior Credit Facility Obligations) and is not secured by any other assets; *provided* that an authorized representative of the holders of such Indebtedness shall be a party to the First Lien Intercreditor Agreement or shall have executed a joinder to the First Lien Intercreditor Agreement.

"*Additional First Lien Secured Parties*" means the holders of any Additional First Lien Obligations and any trustee, authorized representative or agent of such Additional First Lien Obligations.

"*Affiliate*" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise.

"*Applicable Calculation Date*" or "*date of determination*" means the applicable date of calculation for the specified financial ratio, amount or percentage. For clarity, for purposes of the provisions described under "—Limited Condition Acquisition and Specified Transactions," the Applicable Calculation Date may, at the option of a Testing Party, be the Transaction Test Date.

"*Applicable Measurement Period*" means the most recently completed four consecutive fiscal quarters of the Issuer immediately preceding the Applicable Calculation Date for which internal financial statements are available.

"*Applicable Percentage*" means (a) 100% if the Consolidated First Lien Debt Ratio (determined on a pro forma basis after giving effect to such Asset Sale and the use of proceeds therefrom) as of the Applicable Measurement Period is greater than 4.50:1.00, (b) 50.0% if the Consolidated First Lien Debt Ratio (determined on a pro forma basis after giving effect to such Asset Sale and the use of proceeds therefrom) as of the Applicable Measurement Period is less than or equal to 4.50:1.00 and greater than 3.75:1.00 and (c) 0.0% if the Consolidated First Lien Debt Ratio (determined on a pro forma basis after giving effect to such Asset Sale and the use of proceeds therefrom) as of the Applicable Measurement Period is less than or equal to 3.75:1.00.

"*Applicable Premium*" means with respect to any Note on any Redemption Date, the greater of:

(1) 1.0% of the principal amount of such Note; and

(2) the excess, if any, of (a)(i) the sum of the present values at such Redemption Date of (A) the redemption price of such Note at , 2022 (such redemption price being set forth in the table appearing above under the caption "—Optional Redemption"), plus (B) all required remaining scheduled interest payments due on such Note through , 2022, discounted to the date of redemption on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Bund Rate as of such Redemption Date plus 50 basis points, *minus* (ii) accrued but unpaid interest to, but excluding, the Redemption Date *over* (b) the principal amount of such Note.

Calculation of the Applicable Premium will be made by the Issuer or on behalf of the Issuer by such Person as the Issuer shall designate; *provided* that such calculation or the correctness thereof shall not be a duty or obligation of the Trustee.

"*Asset Sale*" means:

(1) the sale, conveyance, transfer or other disposition (including, in each case, by way of Division), whether in a single transaction or a series of related transactions, of property or assets (including by way of a Sale and Lease-Back Transaction) of the Issuer or any of its Restricted Subsidiaries (each referred to in this definition as a "disposition"); or

(2) the issuance or sale of Equity Interests of any Restricted Subsidiary (other than Preferred Stock of Restricted Subsidiaries issued in compliance with the covenant described under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock"), whether in a single transaction or a series of related transactions and whether effected pursuant to a Division or otherwise; in each case, other than:

(a) any disposition of Cash Equivalents or Investment Grade Securities or obsolete, damaged, unnecessary, unsuitable or worn out property or equipment or other assets, in each case,

in the ordinary course of business or any disposition of inventory, immaterial assets or goods (or other assets), property or equipment held for sale or no longer used or useful, or economically practicable to maintain, in the conduct of the business of the Issuer and any of its Subsidiaries;

(b) the disposition of all or substantially all of the assets of the Issuer or any Restricted Subsidiary in a manner permitted pursuant to the provisions described above under "Certain Covenants—Merger, Consolidation, Amalgamation or Sale of All or Substantially All Assets" or any disposition that constitutes a Change of Control pursuant to the Indenture;

(c) any disposition, issuance or sale in connection with the making of any Restricted Payment that is permitted to be made, and is made, under the covenant described above under "Certain Covenants—Limitation on Restricted Payments" or any Permitted Investment;

(d) any disposition of property or assets, or issuance or sale of Equity Interests of any Restricted Subsidiary, in any single transaction or series of related transactions with an aggregate fair market value of less than the greater of (x) $110.0 million and (y) 10.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period;

(e) any disposition of property or assets, or issuance of securities by a Restricted Subsidiary of the Issuer, to the Issuer or by the Issuer or a Restricted Subsidiary of the Issuer to another Restricted Subsidiary of the Issuer;

(f) to the extent allowable under Section 1031 of the Code, or any comparable or successor provision, any exchange of like property (excluding any boot thereon) for use in a Similar Business, which may be in connection with an Asset Sale;

(g) the lease, assignment, sublease, license or sublicense of any real or personal property (including the provision of software under an open source license) in the ordinary course of business or consistent with past practice;

(h) any issuance, sale or pledge of Equity Interests in, or Indebtedness or other securities of, an Unrestricted Subsidiary (or a Restricted Subsidiary which owns an Unrestricted Subsidiary so long as such Restricted Subsidiary owns no assets other than the Equity Interests of such Unrestricted Subsidiary);

(i) foreclosures, condemnation, expropriation, forced dispositions, eminent domain or any similar action (whether by deed in lieu of condemnation or otherwise) with respect to assets or the granting of Liens not prohibited by the Indenture, and transfers of any property that have been subject to a casualty to the respective insurer of such property as part of an insurance settlement or upon receipt of the net proceeds of such casualty event;

(j) sales or discounts (with or without recourse) (including by way of assignment or participation) of (i) accounts receivable in connection with the collection or compromise thereof (including sales to factors or other third parties) and (ii) receivables and related assets, or any disposition of the Equity Interests in a Subsidiary, all or substantially all of the assets of which are receivables and related assets, pursuant to any Permitted Receivables Financing;

(k) any financing transaction with respect to property built or acquired by the Issuer or any Restricted Subsidiary after the Issue Date, including Sale and Lease-Back Transactions and asset securitizations permitted by the Indenture;

(l) any surrender or waiver of contractual rights or the settlement, release or surrender of contractual rights or other litigation claims in the ordinary course of business or consistent with past practice;

(m) the sale, lease, assignment, license, sublease or discount of inventory, equipment, accounts receivable, notes receivable or other assets in the ordinary course of business or consistent with past practice or the conversion of accounts receivable to notes receivable or other dispositions of accounts receivable in connection with the collection or compromise thereof;

(n) the licensing, sub-licensing or cross-licensing of intellectual property or other general intangibles in the ordinary course of business or consistent with past practice or that is immaterial;

(o) the unwinding of any Hedging Obligations or Cash Management Obligations;

(p) sales, transfers and other dispositions of Investments in joint ventures to the extent required by, or made pursuant to, customary buy/sell arrangements between the joint venture parties set forth in joint venture arrangements and similar binding arrangements;

(q) the lapse, abandonment or invalidation of intellectual property rights, which in the reasonable determination of the Board of the Issuer or the senior management thereof (or any Parent Entity of the Issuer) are not material to the conduct of the business of the Issuer and its Restricted Subsidiaries taken as a whole or are no longer used or useful or economically practicable or commercially reasonable to maintain;

(r) the issuance of directors' qualifying shares and shares issued to foreign nationals or other third parties as required by applicable law;

(s) the disposition of any assets (including Equity Interests) (i) acquired in a transaction after the Issue Date, which assets are not material and used or useful in the core or principal business of the Issuer and its Restricted Subsidiaries, or (ii) made in connection with the approval of any applicable antitrust authority or otherwise necessary or advisable in the good faith determination of the Issuer to consummate any acquisition;

(t) any disposition of property or assets of a Foreign Subsidiary the Net Proceeds of which the Issuer has determined in good faith that the repatriation of such Net Proceeds (i) is prohibited or subject to limitations under applicable law, orders, decrees or determinations of any arbitrator, court or governmental authority or (ii) would have a material adverse tax consequence (taking into account any foreign tax credit or benefit actually realized in connection with such repatriation); *provided* that when the Issuer determines in good faith that repatriation of any of such Net Proceeds (i) is no longer prohibited or subject to limitations under such applicable law, orders, decrees or determinations of any arbitrator, court or governmental authority or (ii) would no longer have a material adverse tax consequence (taking into account any foreign tax credit or benefit actually realized in connection with such repatriation), such amount at such time shall be considered the Net Proceeds in respect of an Asset Sale;

(u) dispositions of property to the extent that (i) such property is exchanged for credit against the purchase price of similar replacement property or (ii) an amount equal to the Net Proceeds of such disposition are promptly applied to the purchase price of such replacement property;

(v) the granting of a Lien that is permitted under the covenant described above under "—Certain Covenants—Liens";

(w) any sale, transfer or other disposition to effect the formation of any Subsidiary that is a Delaware Divided LLC; *provided* that upon formation of such Delaware Divided LLC, such Delaware Divided LLC shall be a Restricted Subsidiary;

(x) any disposition of Capital Stock of a Restricted Subsidiary pursuant to an agreement or other obligation with or to a Person (other than the Issuer or a Restricted Subsidiary) from whom such Restricted Subsidiary was acquired, or from whom such Restricted Subsidiary acquired its business and assets (having been newly formed in connection with such acquisition), made as part of such acquisition and in each case comprising all or a portion of the consideration in respect of such sale or acquisition; and

(y) the sales of property or assets for an aggregate fair market value not to exceed the greater of (x) $140.0 million and (y) 12.50% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period.

In the event that a transaction (or any portion thereof) meets the criteria of a permitted Asset Sale and would also be a permitted Restricted Payment or Permitted Investment, the Issuer, in its sole discretion, will be entitled to divide and classify such transaction (or a portion thereof) as an Asset Sale and/or one or more of the types of permitted Restricted Payments or Permitted Investments.

"*Asset Sale Offer*" has the meaning set forth in the third paragraph under "—Repurchase at the Option of Holders—Asset Sales."

"*A/R Facility*" means the transactions contemplated from time to time in that certain Receivables Purchase Agreement, dated as of March 27, 2020, as amended, by and among Avantor Receivables Funding, LLC, VWR International, LLC, the various conduit purchasers from time to time party thereto, the various related committed purchasers from time to time party thereto, the various purchaser agents from time to time party thereto, the various LC participants from time to time party thereto and PNC Bank, National Association, as Administrator and LC Bank.

"*Bank Collateral Agent*" means Goldman Sachs Bank USA, in its capacity as collateral agent for the lenders and other secured parties under the Senior Credit Facilities, together with its successors and permitted assigns under the Senior Credit Facilities.

"*Board*" with respect to a Person means the board of directors (or similar body) of such Person or any committee thereof duly authorized to act on behalf of such board of directors (or similar body).

"*Bund Rate*" means, as of any Redemption Date, the rate per annum equal to the equivalent yield to maturity as of such Redemption Date of the Comparable German Bund Issue, assuming a price for the Comparable German Bund Issue (expressed as a percentage of its principal amount) equal to the Comparable German Bund Price for such relevant date, where:

(1) "*Comparable German Bund Issue*" means the German Bundesanleihe security selected by any Reference German Bund Dealer as having a fixed maturity most nearly equal to the period from such Redemption Date to , 2022, and that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of Euro-denominated corporate debt securities in a principal amount approximately equal to the then outstanding principal amount of the Notes and of a maturity most nearly equal to , 2022; *provided*, *however*, that, if the period from such Redemption Date to , 2022 is less than one year, a fixed maturity of one year shall be used;

(2) "*Comparable German Bund Price*" means, with respect to any relevant date, the average of all Reference German Bund Dealer Quotations for such date (which, in any event, must include at least two such quotations), after excluding the highest and lowest such Reference German Bund Dealer Quotations, or if the Issuer obtains fewer than four such Reference German Bund Dealer Quotations, the average of all such quotations;

(3) "*Reference German Bund Dealer*" means any dealer of German Bundesanleihe securities appointed by the Issuer in good faith; and

(4) "*Reference German Bund Dealer Quotations*" means, with respect to each Reference German Bund Dealer and any relevant date, the average as determined by the Issuer of the bid and offered prices for the Comparable German Bund Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Issuer by such Reference German Bund Dealer at 3:30 p.m., Frankfurt, Germany time, on the third Business Day preceding the relevant date.

"*Business Day*" means each day that is not a Legal Holiday.

"*Capital Stock*" means:

(1) in the case of a corporation, corporate stock;

(2) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;

(3) in the case of a partnership or limited liability company, partnership or membership interests (whether general or limited); and

(4) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person.

"*Capitalized Software Expenditures*" means, for any period, the aggregate of all expenditures (whether paid in cash or accrued as liabilities) by a Person and its Restricted Subsidiaries during such period in respect of purchased software or internally developed software and software enhancements that, in conformity with GAAP, are or are required to be reflected as capitalized costs on the consolidated balance sheet of a Person and its Restricted Subsidiaries.

"*Cash Equivalents*" means:

(1) (a) U.S. dollars;

(b) Canadian dollars, euros, pounds sterling or any national currency of any participating member state of the EMU; or

(c) other currencies held by the Issuer and the Restricted Subsidiaries from time to time in the ordinary course of business;

(2) securities issued or directly and fully and unconditionally guaranteed or insured by the U.S. government or any agency or instrumentality thereof the securities of which are unconditionally guaranteed as a full faith and credit obligation of the U.S. government with average maturities of 24 months or less from the date of acquisition;

(3) certificates of deposit, time deposits and eurodollar time deposits with average maturities of one year or less from the date of acquisition, demand deposits, bankers' acceptances with average maturities not exceeding one year and overnight bank deposits, in each case with any commercial bank having capital and surplus of not less than $100.0 million (or the foreign currency equivalent thereof);

(4) repurchase obligations for underlying securities of the types described in clauses (2), (3) and (9) entered into with any financial institution meeting the qualifications specified in clause (3) above;

(5) commercial paper rated at least P-2 by Moody's or at least A-2 by S&P (or, if at any time, neither Moody's nor S&P shall be rating such obligations, an equivalent rating from another Rating Agency) and variable or fixed rate notes issued by any financial institution meeting the qualifications

specified in clause (3) above, in each case, with average maturities of 24 months after the date of creation thereof;

(6) marketable short-term money market and similar securities having a rating of at least P-2 or A-2 from either Moody's or S&P, respectively (or, if at any time neither Moody's nor S&P shall be rating such obligations, an equivalent rating from another Rating Agency);

(7) investment funds investing at least 90% of their assets in securities of the types described in clauses (1) through (6) above and (8) through (11) below;

(8) securities issued or directly and fully and unconditionally guaranteed by any state, commonwealth or territory of the United States or any political subdivision or taxing authority of any such state, commonwealth or territory or any public instrumentality thereof having average maturities of not more than 24 months from the date of acquisition thereof;

(9) readily marketable direct obligations issued or directly and fully and unconditionally guaranteed by any foreign government or any political subdivision or public instrumentality thereof, in each case (other than in the case of such securities issued or guaranteed by any participating member state of the EMU) having an Investment Grade Rating from any Rating Agency (or, if at any time any Rating Agency shall not be rating such obligations, an equivalent rating from another Rating Agency) with average maturities of 24 months or less from the date of acquisition;

(10) Indebtedness or Preferred Stock issued by Persons with a rating of "A" or higher from S&P or "A2" or higher from Moody's (or, if at any time neither Moody's nor S&P shall be rating such obligations, an equivalent rating from another Rating Agency) with average maturities of 24 months or less from the date of acquisition;

(11) Investments with average maturities of 24 months or less from the date of acquisition in money market funds rated A (or the equivalent thereof) or better by S&P or A2 (or the equivalent thereof) or better by Moody's (or, if at any time neither Moody's nor S&P shall be rating such obligations, an equivalent rating from another Rating Agency);

(12) in the case of Investments by any Foreign Subsidiary of the Issuer, Investments for cash management purposes of comparable tenor and credit quality to those described in the foregoing clauses (1) through (11) customarily utilized in countries in which such Foreign Subsidiary operates; and

(13) Investments, classified in accordance with GAAP as current assets, in money market investment programs that are registered under the Investment Company Act of 1940 or that are administered by financial institutions meeting the qualifications specified in clause (3) above, and, in either case, the portfolios of which are limited such that substantially all of such Investments are of the character, quality and maturity described in clauses (1) through (12) of this definition.

Notwithstanding the foregoing, Cash Equivalents shall include amounts denominated in currencies other than those set forth in clause (1) above; *provided* that such amounts are converted into any currency listed in clause (1) as promptly as practicable and in any event within ten Business Days following the receipt of such amounts.

For the avoidance of doubt, any items identified as Cash Equivalents under this definition will be deemed to be Cash Equivalents for all purposes under the Indenture regardless of the treatment of such items under GAAP.

"*Cash Management Obligations*" means (1) obligations of the Issuer or any of its Restricted Subsidiaries in respect of any overdraft and related liabilities arising from treasury, depository, cash pooling arrangements and cash management or treasury services or any automated clearing house transfers of funds, (2) other obligations in respect of netting services, employee credit or purchase card programs and similar arrangements and (3) obligations in respect of any other services related, ancillary or complementary to the foregoing (including any overdraft and

related liabilities arising from treasury, depository, cash pooling arrangements and cash management services, corporate credit and purchasing cards and related programs or any automated clearing house transfers of funds).

"*Change of Control*" means the occurrence of one or more of the following events after the Issue Date:

(1) the sale, lease or transfer, in one or a series of related transactions, of all or substantially all of the assets of the Issuer and its Restricted Subsidiaries, taken as a whole, to any Person other than any Permitted Holders; or

(2) the Issuer becomes aware of (by way of a report or any other filing pursuant to Section 13(d) of the Exchange Act, proxy, vote, written notice or otherwise) the acquisition by any Person or group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act or any successor provision), including any group acting for the purpose of acquiring, holding or disposing of Equity Interests of the Issuer (within the meaning of Rule 13d-5(b)(1) under the Exchange Act or any successor provision), other than the Permitted Holders, in a single transaction or in a related series of transactions, by way of merger, consolidation, amalgamation or other business combination or purchase, of beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act or any successor provision) of more than 50% of the total voting power of the Voting Stock entitled to vote for the election of directors of the Issuer having a majority of the aggregate votes on the Board of the Issuer, unless the Permitted Holders otherwise have the right (pursuant to contract, proxy or otherwise), directly or indirectly, to designate, nominate or appoint a majority of the directors of the Issuer.

Notwithstanding the preceding or any provision of Section 13d-3 of the Exchange Act, (i) a Person or group shall not be deemed to beneficially own Voting Stock (x) subject to a stock or asset purchase agreement, merger agreement, option agreement, warrant agreement or similar agreement (or voting or option or similar agreement related thereto) until the consummation of the acquisition of the Voting Stock in connection with the transactions contemplated by such agreement or (y) as a result of limited customary veto or approval rights over fundamental actions in any joint venture agreement, shareholder agreement, investor rights agreement or other similar agreement, (ii) if any group (other than a Permitted Holder) includes one or more Permitted Holders, the issued and outstanding Voting Stock of the Issuer owned, directly or indirectly, by any Permitted Holders that are part of such group shall not be treated as being beneficially owned by such group or any other member of such group for purposes of determining whether a Change of Control has occurred and (iii) a Person or group will not be deemed to beneficially own the Voting Stock of a Person (the "*Subject Person*") held by a parent of such Subject Person unless it owns more than 50% of the total voting power of the Voting Stock entitled to vote for the election of directors of such Parent Entity having a majority of the aggregate votes on the Board of such parent.

"*CFC*" means any "controlled foreign corporation" within the meaning of Section 957 of the Code.

"*Code*" means the Internal Revenue Code of 1986, as amended, or any successor thereto.

"*Collateral*" means all of the assets and property of the Issuer or any Guarantor, whether real, personal or mixed securing or purported to secure any First Lien Notes Obligations, other than Excluded Assets.

"*Collateral Agent*" means (1) in the case of any Senior Credit Facility Obligations, the Bank Collateral Agent, (2) in the case of the First Lien Notes Obligations, the Notes Collateral Agent and (3) in the case of any Additional First Lien Obligations, the collateral agent, administrative agent or the trustee with respect thereto.

"*Consolidated EBITDA*" means, as of any Applicable Calculation Date, with respect to any Person and its Restricted Subsidiaries for any period, the Consolidated Net Income of such Person for such period, *plus*:

(1) without duplication and to the extent already deducted (and not added back) in arriving at such Consolidated Net Income, the sum of the following amounts for such period:

(a) Fixed Charges of such Person for such period and, to the extent not reflected in Fixed Charges, any losses on Hedging Obligations or other derivative instruments entered into for

the purpose of hedging interest rate risk, net of interest income and gains on such Hedging Obligations or such derivative instruments, and bank and letter of credit fees and costs of surety bonds in connection with financing activities, plus items excluded from the definition of "Consolidated Interest Expense" pursuant to clauses (a) through (k) thereof, *plus*

(b) provision for taxes based on income, profits, revenue or capital, including federal, foreign and state income, franchise, excise, value added and similar taxes based on income, profits, revenue or capital and foreign withholding taxes of such Person paid or accrued during such period (including in respect of repatriated funds), including any penalties and interest relating to such taxes or arising from any tax examinations, and (without duplication) any payments to a Parent Entity pursuant to clause (13) of the third paragraph under "Certain Covenants—Limitation on Restricted Payments" in respect of such taxes, *plus*

(c) the total amount of depreciation and amortization expense (including amortization of deferred financing fees or costs, internal labor costs, debt issuance costs, commissions fees and expenses, capitalized expenditures (including Capitalized Software Expenditures), customer acquisition costs and incentive payments, conversion costs and contract acquisition costs) of such Person and its Restricted Subsidiaries for such period on a consolidated basis and otherwise determined in accordance with GAAP, *plus*

(d) any other non-cash charges (other than any accrual in respect of bonuses), including any write offs, write downs, expenses, losses or items (*provided*, in each case, that if any non-cash charges represent an accrual or reserve for potential cash items in any future period, (A) such Person may elect not to add back such non-cash charges in the current period and (B) to the extent such Person elects to add back such non-cash charges in the current period, the cash payment in respect thereof in such future period shall be subtracted from Consolidated EBITDA to such extent, and excluding amortization of a prepaid cash item that was paid in a prior period), *plus*

(e) the amount of any non-controlling interest consisting of income attributable to non-controlling interests of third parties in any non-Wholly-Owned Subsidiary deducted (and not added back) in such period in calculating Consolidated Net Income, excluding cash distributions in respect thereof, *plus*

(f) (i) the amount of management, monitoring, consulting and advisory fees, indemnities and related expenses paid or accrued in such period to (or on behalf of) the Investors (including any termination fees payable in connection with the early termination of management and monitoring agreements), (ii) the amount of payments made to option, phantom equity or profits interests holders of such Person or any of its Parent Entities in connection with, or as a result of, any distribution being made to shareholders of such Person or its Parent Entities, which payments are being made to compensate such option, phantom equity or profits interests holders as though they were shareholders at the time of, and entitled to share in, such distribution, including any cash consideration for any repurchase of equity, in each case to the extent permitted under the Indenture (including expenses relating to distributions made to equity holders of such Person or any of its Parent Entities resulting from the application of FASB Accounting Standards Codification Topic 718—Compensation—Stock Compensation and (iii) the amount of fees, expenses and indemnities paid to directors of any Parent Entity, *plus*

(g) losses or discounts on sales of receivables and related assets in connection with any Permitted Receivables Financing, *plus*

(h) cash receipts (or any netting arrangements resulting in reduced cash expenditures) not included in the calculation of Consolidated Net Income in any period to the extent non-cash gains relating to such income were deducted in the calculation of Consolidated EBITDA pursuant to paragraph (3) below for any previous period and not added back, *plus*

(i) any costs or expenses incurred by such Person or any of its Restricted Subsidiaries pursuant to any management equity plan or stock option plan or phantom equity or any other management or employee benefit plan or agreement, any severance agreement or any stock subscription or shareholder agreement, to the extent that such costs or expenses are non-cash or otherwise funded with cash proceeds contributed to the capital of such Person or Net Proceeds of an issuance of Equity Interests of such Person (other than Disqualified Stock), *plus*

(j) any net pension or other post-employment benefit costs representing amortization of unrecognized prior service costs, actuarial losses, including amortization of such amounts arising in prior periods, amortization of the unrecognized net obligation (and loss or cost) existing at the date of initial application of FASB Accounting Standards Codification Topic 715—*Compensation—Retirement Benefits*, and any other items of a similar nature, *plus*

(k) with respect to any joint venture that is not a Restricted Subsidiary, an amount equal to the proportion of those items described in clauses (b) and (c) above relating to such joint venture corresponding to such Person and its Restricted Subsidiaries' proportionate share of such joint venture's Consolidated Net Income (determined as if such joint venture were a Restricted Subsidiary),

plus

(2) without duplication, the amount of "run rate" cost savings, operating expense reductions and synergies related to the VWR Transaction or any other Specified Event (as defined below) projected by such Person in good faith to be realized as a result of actions that have been taken or initiated or are expected to be taken (in the good faith determination of such Person), including any cost savings, expenses and charges (including restructuring and integration charges) in connection with, or incurred by or on behalf of, any joint venture of the Issuer or any of its Restricted Subsidiaries (whether accounted for on the financial statements of any such joint venture or such Person) (a) with respect to the VWR Transaction, on or prior to November 21, 2020 (including actions initiated prior to November 21, 2017) and (b) with respect to any investment, sale, transfer or other disposition of assets, incurrence or repayment of Indebtedness, Restricted Payment, Subsidiary designation, restructuring, cost saving initiative or other initiative (collectively, a "*Specified Event*"), whether initiated, before, on or after the Issue Date, within 18 months after such Specified Event (which cost savings shall be added to Consolidated EBITDA until fully realized and calculated on a pro forma basis as though such cost savings had been realized on the first day of the relevant period), net of the amount of actual benefits realized from such actions; *provided* that (i) such cost savings are reasonably quantifiable and factually supportable, (ii) no cost savings, operating expense reductions or synergies shall be added pursuant to this clause (2) to the extent duplicative of any expenses or charges relating to such cost savings, operating expense reductions or synergies that are included in clause (1) above (it being understood and agreed that "run rate" shall mean the full recurring benefit that is associated with any action taken) and (iii) no cost savings, operating expense reductions or synergies relating to any Specified Event shall be added pursuant to this clause (2) except to the extent the cost savings, operating expense reductions and synergies relating to the VWR Transaction have been achieved or are no longer available or permitted to be added pursuant to this clause (2), in which case an amount up to such amounts that have been achieved or are no longer available or permitted shall be added to Consolidated EBITDA to the extent otherwise allowed pursuant to this clause (2); *provided, further*, that the aggregate amount of any adjustments made pursuant to clauses (a) and (b) for any transactions following the Issue Date shall not exceed in the aggregate 30% of Consolidated EBITDA for such period (before giving effect to any such adjustments); provided, further, that addbacks (x) made otherwise in accordance with Regulation S-X promulgated by the SEC or (y) presented in this Offering Circular and relating to the twelve month period ended September 30, 2020 shall not be included in the foregoing cap of 30% of Consolidated EBITDA,

less

(3) without duplication and to the extent included in arriving at such Consolidated Net Income, the sum of the following amounts for such period:

(a) non-cash gains (excluding any non-cash gain to the extent it represents the reversal of an accrual or reserve for a potential cash item that reduced Consolidated Net Income or Consolidated EBITDA in any prior period), and

(b) the amount of any non-controlling interest consisting of loss attributable to non-controlling interests of third parties in any non-Wholly-Owned Subsidiary added (and not deducted) in such period from Consolidated Net Income,

in each case, as determined on a consolidated basis for such Person and its Restricted Subsidiaries in accordance with GAAP.

"*Consolidated First Lien Debt Ratio*" means, as of any Applicable Calculation Date, with respect to any Person and its Restricted Subsidiaries, the ratio of (1) Consolidated Total Indebtedness of such Person and its Restricted Subsidiaries that is secured by a Lien (other than Indebtedness secured by the Collateral with a Junior Lien Priority relative to the Notes and the Guarantees) minus cash and Cash Equivalents of such Person and its Restricted Subsidiaries (including, for the avoidance of doubt, any cash and Cash Equivalents held by such Person and its Restricted Subsidiaries that are restricted in favor of the administrative agent or any other applicable collateral agent in respect of the obligations of the borrowers under the Senior Credit Facilities), in each case, computed as of the end of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Applicable Calculation Date to (2) such Person's Consolidated EBITDA for the Applicable Measurement Period, in each case with such pro forma adjustments to Consolidated Total Indebtedness, cash, Cash Equivalents and Consolidated EBITDA as are appropriate and consistent with the pro forma adjustment provisions set forth in the definition of Fixed Charge Coverage Ratio (other than as set forth in the first proviso to the first paragraph of such definition); *provided* that, for purposes of the calculation of the Consolidated First Lien Debt Ratio, in connection with (x) the incurrence of any Indebtedness pursuant to clause (1) of the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" or (y) the incurrence of any Lien pursuant to clause (12) and (34) of the definition of "Permitted Liens," such Person may elect to treat all or any portion of the commitment (such amount elected until revoked as described below, the "*Elected Amount*") under any Indebtedness which is to be incurred (or any commitment in respect thereof) or secured by such Lien, as the case may be, as being incurred or secured, as the case may be, as of the Applicable Calculation Date and (i) any subsequent incurrence of such Indebtedness under such commitment (so long as the total amount under such Indebtedness does not exceed the Elected Amount) shall not be deemed, for purposes of this calculation, to be an incurrence of additional Indebtedness or an additional Lien at such subsequent time, (ii) such Person may revoke an election of an Elected Amount and (iii) for purposes of subsequent calculations of the Consolidated First Lien Debt Ratio, the Elected Amount (if any) shall be deemed to be outstanding, whether or not such amount is actually outstanding.

"*Consolidated Interest Expense*" means, with respect to any Person and its Restricted Subsidiaries, the sum of (1) cash interest expense (including that attributable to Financing Lease Obligations), net of cash interest income of such Person and its Restricted Subsidiaries with respect to all outstanding Indebtedness of such Person and its Restricted Subsidiaries (excluding any Non-Recourse Indebtedness permitted to be incurred under clause (21) under the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock"), including all commissions, discounts and other fees and charges owed with respect to letters of credit and bankers' acceptance financing and net costs under hedging agreements, plus (2) non-cash interest expense resulting solely from (x) the amortization of original issue discount and original insurance premium from the issuance of Indebtedness of such Person and its Restricted Subsidiaries (excluding Indebtedness borrowed in connection with the VWR Transaction (and any Permitted Refinancing thereof) and any Non-Recourse Indebtedness permitted to be incurred under clause (21) under the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock") at less than par and (y) pay-in-kind interest expense of such Person and its Restricted Subsidiaries but excluding, for the avoidance of doubt, (a) amortization or expensing of deferred financing costs, debt issuance costs, amendment and consent fees, commissions, fees, expenses and discount liabilities and any other amounts of non-cash interest other than specifically referred to in clause (2) above (including as a result of the effects of acquisition method accounting or pushdown accounting), (b) non-cash interest expense attributable to the movement of the mark-to-market valuation of Indebtedness or obligations under Hedging Obligations or other derivative instruments pursuant to FASB Accounting Standards Codification Topic 815—*Derivatives and Hedging*, (c) any one-time cash costs

associated with breakage in respect of hedging agreements for interest rates, (d) commissions, discounts, yield, make-whole premium and other fees and charges (including any interest expense) incurred in connection with any Permitted Receivables Financing, (e) all non-recurring cash interest expense consisting of "additional interest," "special interest" or "liquidated damages" for failure to timely comply with registration rights obligations with respect to any securities, (f) any payments with respect to make-whole premiums, penalties or other breakage costs of any Indebtedness, (g) penalties and interest relating to taxes, (h) accretion or accrual of discounted liabilities not constituting Indebtedness, (i) interest expense attributable to a Parent Entity resulting from push-down accounting, (j) any expense resulting from the discounting of Indebtedness in connection with the application of recapitalization or purchase accounting in connection with the VWR Transaction or any acquisition, (k) any interest expense attributable to the exercise of appraisal rights and the settlement of any claims or actions (whether actual, contingent or potential), with respect thereto and with respect to the VWR Transaction, any acquisition or Investment permitted hereunder, all as calculated on a consolidated basis in accordance with GAAP, (l) annual agency fees paid to the administrative agents, collateral agents and trustees with the Senior Credit Facilities, other credit facilities or indentures, (m) any expensing of bridge, commitment and other financing fees any other fees related to the VWR Transaction or any acquisitions after the Issue Date, (n) costs associated with obtaining Hedging Obligations and (o) any lease, rental or other expense in connection with Non-Financing Lease Obligations.

For purposes of this definition, interest on a Financing Lease Obligation shall be deemed to accrue at an interest rate reasonably determined by such Person to be the rate of interest implicit in such Financing Lease Obligation in accordance with GAAP (or, if not implicit, as otherwise determined in accordance with GAAP).

"*Consolidated Net Income*" means, with respect to any Person for any period, the net income (loss) of such Person for such period, determined on a consolidated basis, excluding (and excluding the effect of), without duplication:

(1) extraordinary, non-recurring or unusual gains or losses (less all fees and expenses relating thereto) or expenses (including any unusual or non-recurring operating expenses directly attributable to the implementation of cost savings initiatives and any accruals or reserves in respect of any extraordinary, non-recurring or unusual items), severance, relocation costs, integration and facilities' opening costs and other business optimization expenses (including related to new product introductions and other strategic or cost savings initiatives), restructuring charges, accruals or reserves (including restructuring and integration costs related to acquisitions and adjustments to existing reserves), whether or not classified as restructuring expense on the consolidated financial statements, signing costs, retention or completion bonuses, other executive recruiting and retention costs, transition costs, costs related to closure/consolidation of facilities and curtailments or modifications to pension and post-retirement employee benefit plans (including any settlement of pension liabilities and charges resulting from changes in estimates, valuations and judgments), and any other unusual or non-recurring items,

(2) the cumulative effect of a change in accounting principles and changes as a result of adoption or modification of accounting policies during such period,

(3) Transaction Expenses (including any charges associated with the rollover, acceleration or payout of Equity Interests held by management of the Issuer, VWR or any of their respective Subsidiaries or Parent Entities in connection with the VWR Transaction),

(4) the net income (loss) for such period of any Person that is an Unrestricted Subsidiary and any Person that is not a Subsidiary or that is accounted for by the equity method of accounting; *provided* that Consolidated Net Income shall be increased by the amount of dividends or distributions or other payments that are actually paid in cash or Permitted Investments (or, if not paid in cash or Permitted Investments, but later converted into cash or Permitted Investments, upon such conversion) by such Person to the referent Person or a Restricted Subsidiary thereof during such period,

(5) any fees and expenses (including any transaction or retention bonus or similar payment) incurred during such period, or any amortization thereof for such period, in connection with any acquisition, Investment, recapitalization, asset disposition, issuance or repayment of indebtedness, issuance of equity securities, refinancing transaction or amendment or other modification of any debt instrument (in

each case, including any such transaction consummated prior to November 21, 2017 and any such transaction undertaken but not completed) and any charges or non-recurring merger costs incurred during such period as a result of any such transaction, in each case whether or not successful (including, for the avoidance of doubt, the effects of expensing all transaction-related expenses in accordance with FASB Accounting Standards Codification Topic 805—*Business Combinations* and gains or losses associated with FASB Accounting Standards Codification Topic 460—*Guarantees*),

(6) any income (loss) for such period attributable to the early extinguishment of Indebtedness, Hedging Obligations or other derivative instruments (including deferred financing costs written off and premiums paid),

(7) accruals and reserves, contingent liabilities and any gains or losses on the settlement of any pre-existing contractual or non-contractual relationships that are established or adjusted as a result of the VWR Transaction or any acquisition constituting an Investment that are so required to be established or adjusted as a result of such acquisition in accordance with GAAP (including any adjustment of estimated payouts on existing earn-outs) or changes as a result of the adoption or modification of accounting policies during such period,

(8) non-cash expenses and costs that result from the issuance of stock-based awards, partnership interest-based awards and similar incentive-based compensation awards or arrangements,

(9) any income (loss) attributable to deferred compensation plans or trusts,

(10) any income (loss) from investments recorded using the equity method of accounting (but including any cash dividends or distributions actually received by such Person or a Restricted Subsidiary thereof in respect of such investment),

(11) any gain (loss) on asset sales, disposals or abandonments (other than asset sales, disposals or abandonments in the ordinary course of business) or income (loss) from discontinued operations (but if such operations are classified as discontinued due to the fact that they are subject to an agreement to dispose of such operations, only when and to the extent such operations are actually disposed of),

(12) any non-cash gain (loss) attributable to the mark to market movement in the valuation of Hedging Obligations or other derivative instruments pursuant to FASB Accounting Standards Codification Topic 815—*Derivatives and Hedging* or mark to market movement of other financial instruments pursuant to FASB Accounting Standards Codification Topic 825—*Financial Instruments* in such period; *provided* that any cash payments or receipts relating to transactions realized in a given period shall be taken into account in such period,

(13) any non-cash gain (loss) related to currency remeasurements of Indebtedness (including the net loss or gain resulting from Hedging Obligations for currency exchange risk and revaluations of intercompany balances and other balance sheet items),

(14) any non-cash expenses, accruals or reserves related to adjustments to historical tax exposures (*provided*, in each case, that the cash payment in respect thereof in such future period shall be subtracted from Consolidated Net Income for the period in which such cash payment was made),

(15) any impairment charge or asset write-off or write-down (including related to intangible assets (including goodwill), long-lived assets, investments in debt and equity securities) or as a result of change in law or regulation, in each case, pursuant to GAAP, and the amortization of intangibles arising pursuant to GAAP),

(16) solely for the purpose of determining the amount available for Restricted Payments under clause (3)(a) of the first paragraph of "Certain Covenants—Limitation on Restricted Payments," the net income for such period of any Restricted Subsidiary (other than any Subsidiary Guarantor) shall be

excluded to the extent the declaration or payment of dividends or similar distributions by that Restricted Subsidiary of its net income is not at the date of determination wholly permitted without any prior governmental approval (which has not been obtained) or, directly or indirectly, is otherwise restricted by the operation of the terms of its charter or any agreement, instrument, judgment, decree, order, statute, rule or governmental regulation applicable to that Restricted Subsidiary or its stockholders, unless such restriction with respect to the payment of dividends or similar distributions has been legally waived or released (or such Person reasonably believes such restriction could be waived or released and is using commercially reasonable efforts to pursue such waiver or release); *provided* that Consolidated Net Income of such Person will be increased by the amount of dividends or other distributions or other payments actually paid in cash or Cash Equivalents (or, if not paid in cash or Cash Equivalents, but later converted into cash or Cash Equivalents, upon such conversion) to such Person or a Restricted Subsidiary thereof in respect of such period, to the extent not already included therein,

(17) any deferred tax expense associated with tax deductions or net operating losses arising as a result of the VWR Transaction, or the release of any valuation allowance related to such item,

(18) costs associated with, or in anticipation of, or preparation for, compliance with the requirements of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith and other costs and expenses attributable to such Person or any Parent Entity thereof being a Public Company,

(19) the income (or loss) of any Person accrued prior to the date it becomes a Restricted Subsidiary of the Issuer or is merged into or consolidated with the Issuer or any of its Subsidiaries or such Person's assets are acquired by the Issuer or any of its Restricted Subsidiaries (except to the extent required for any calculation of Consolidated EBITDA on a pro forma basis), and

(20) changes to accrual of revenue so long as consistent with past practices of the Issuer and its Subsidiaries (regardless of treatment under GAAP) shall be excluded.

There shall be excluded from Consolidated Net Income for any period the effects from applying acquisition method accounting, including applying acquisition method accounting to inventory, property and equipment, loans and leases, software and other intangible assets and deferred revenue (including deferred costs related thereto and deferred rent) required or permitted by GAAP and related authoritative pronouncements (including the effects of such adjustments pushed down to such Person and its Restricted Subsidiaries), as a result of the VWR Transaction, any acquisition or Investment consummated prior to the Issue Date (including the VWR Transaction) and any other acquisition (by merger, consolidation, amalgamation or otherwise) or other Investment or the amortization or write-off of any amounts thereof.

In addition, to the extent not already included in Consolidated Net Income, Consolidated Net Income shall include (i) the amount of proceeds received or due from business interruption insurance or reimbursement of expenses and charges that are covered by indemnification and other reimbursement provisions in connection with any acquisition or other Investment or any disposition of any asset permitted under the Indenture (net of any amount so added back in any prior period to the extent not so reimbursed within a two-year period) and (ii) the amount of any cash tax benefits related to the tax amortization of intangible assets in such period. For the avoidance of doubt, solely for purposes of clause (3) of the first paragraph of "Certain Covenants—Limitations on Restricted Payments," Consolidated Net Income may include any Consolidated Net Income of or attributable to the target company or assets to be acquired in connection with any Specified Transaction; *provided* that no Restricted Payment may be made in reliance on clause (3) of the first paragraph of "Certain Covenants—Limitation on Restricted Payments" unless and until the closing of such Specified Transaction shall have actually occurred.

"*Consolidated Secured Debt Ratio*" means, as of any Applicable Calculation Date, with respect to any Person and its Restricted Subsidiaries, the ratio of (1) Consolidated Total Indebtedness of such Person and its Restricted Subsidiaries that is secured by a Lien minus cash and Cash Equivalents of such Person and its Restricted Subsidiaries (including, for the avoidance of doubt, any cash and Cash Equivalents held by such Person and its Restricted Subsidiaries that are restricted in favor of the administrative agent or any other applicable collateral agent in respect of the obligations of the borrowers under the Senior Credit Facilities), in each case, computed as of the

end of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Applicable Calculation Date to (2) such Person's Consolidated EBITDA for the Applicable Measurement Period, in each case with such pro forma adjustments to Consolidated Total Indebtedness, cash, Cash Equivalents and Consolidated EBITDA as are appropriate and consistent with the pro forma adjustment provisions set forth in the definition of Fixed Charge Coverage Ratio (other than as set forth in the first proviso to the first paragraph of such definition); *provided* that, for purposes of the calculation of the Consolidated Secured Debt Ratio, in connection with (x) the incurrence of any Indebtedness pursuant to clause (1) of the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" or (y) the incurrence of any Lien pursuant to clause (12) and (34) of the definition of "Permitted Liens," such Person may elect to treat all or any portion of the commitment (such amount elected until revoked as described below, the "*Elected Amount*") under any Indebtedness which is to be incurred (or any commitment in respect thereof) or secured by such Lien, as the case may be, as being incurred or secured, as the case may be, as of the Applicable Calculation Date and (i) any subsequent incurrence of such Indebtedness under such commitment (so long as the total amount under such Indebtedness does not exceed the Elected Amount) shall not be deemed, for purposes of this calculation, to be an incurrence of additional Indebtedness or an additional Lien at such subsequent time, (ii) such Person may revoke an election of an Elected Amount and (iii) for purposes of subsequent calculations of the Consolidated Secured Debt Ratio, the Elected Amount (if any) shall be deemed to be outstanding, whether or not such amount is actually outstanding.

"*Consolidated Total Debt Ratio*" means, as of any Applicable Calculation Date, with respect to any Person and its Restricted Subsidiaries, the ratio of (1) Consolidated Total Indebtedness of such Person and its Restricted Subsidiaries minus cash and Cash Equivalents of such Person and its Restricted Subsidiaries (including, for the avoidance of doubt, any cash and Cash Equivalents held by such Person and its Restricted Subsidiaries that are restricted in favor of the administrative agent or any other applicable collateral agent in respect of the obligations of the borrowers under the Senior Credit Facilities), in each case, computed as of the end of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Applicable Calculation Date to (2) such Person's Consolidated EBITDA for the Applicable Measurement Period, in each case with such pro forma adjustments to Consolidated Total Indebtedness, cash, Cash Equivalents and Consolidated EBITDA as are appropriate and consistent with the pro forma adjustment provisions set forth in the definition of Fixed Charge Coverage Ratio (other than as set forth in the first proviso to the first paragraph of such definition); *provided* that, for purposes of the calculation of Consolidated Total Debt Ratio, in connection with the incurrence of any Indebtedness pursuant to the covenant described under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," such Person may elect to treat an Elected Amount under any Indebtedness which is to be incurred (or any commitment in respect thereof) as being incurred as of the Applicable Calculation Date and (i) any subsequent incurrence of such Indebtedness under such commitment (so long as the total amount under such Indebtedness does not exceed the Elected Amount) shall not be deemed, for purposes of this calculation, to be an incurrence of additional Indebtedness at such subsequent time, (ii) such Person may revoke an election of an Elected Amount and (iii) for purposes of subsequent calculations of the Consolidated Total Debt Ratio, the Elected Amount (if any) shall be deemed to be outstanding, whether or not such amount is actually outstanding.

"*Consolidated Total Indebtedness*" means, as of any Applicable Calculation Date, with respect to any Person and its Restricted Subsidiaries, an amount equal to the sum of (1) the aggregate amount of all outstanding Indebtedness of such Person and its Restricted Subsidiaries on a consolidated basis consisting of Indebtedness for borrowed money, unreimbursed drawings under letters of credit, Obligations in respect of Financing Lease Obligations and third-party debt obligations evidenced by promissory notes and similar instruments (and excluding, for the avoidance of doubt, (A) all undrawn amounts under revolving credit facilities (except to the extent of any Elected Amount), (B) Hedging Obligations, (C) performance bonds or any similar instruments, and (D) the effects of any discounting of Indebtedness resulting from the application of acquisition method accounting in connection with the VWR Transaction or any acquisition (by merger, consolidation, amalgamation, dividend, distribution or otherwise) or other Investment) and (2) the aggregate amount of all outstanding Disqualified Stock of such Person and all Preferred Stock of its Restricted Subsidiaries on a consolidated basis, with the amount of such Disqualified Stock and Preferred Stock equal to the greater of their respective voluntary or involuntary liquidation preferences and maximum fixed repurchase prices, in each case determined on a consolidated basis in accordance with GAAP; *provided*, *however*, that Consolidated Total Indebtedness shall exclude all Obligations relating to Non-Financing Lease Obligations. For purposes hereof, the "maximum fixed repurchase price" of any Disqualified Stock or

Preferred Stock that does not have a fixed repurchase price shall be calculated in accordance with the terms of such Disqualified Stock or Preferred Stock as if such Disqualified Stock or Preferred Stock were purchased on any date on which Consolidated Total Indebtedness shall be required to be determined pursuant to the Indenture, and if such price is based upon, or measured by, the fair market value of such Disqualified Stock or Preferred Stock, such fair market value shall be determined in good faith by the Board or senior management of such Person.

"*Contingent Obligations*" means, with respect to any Person, any obligation of such Person guaranteeing any leases, dividends or other obligations that do not constitute Indebtedness ("*primary obligations*") of any other Person (the "*primary obligor*") in any manner, whether directly or indirectly, including, without limitation, any obligation of such Person, whether or not contingent,

(1) to purchase any such primary obligation or any property constituting direct or indirect security therefor,

(2) to advance or supply funds:

(a) for the purchase or payment of any such primary obligation, or

(b) to maintain working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency of the primary obligor, or

(3) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation against loss in respect thereof.

"*Controlled Investment Affiliate*" means, as to any Person, any other Person, other than any Investor, which directly or indirectly controls, is controlled by, or is under common control with such Person and is organized by such Person (or any Person controlling such Person) primarily for making direct or indirect equity or debt investments in the Issuer and/or other Persons.

"*Controlling Collateral Agent*" means, with respect to any Shared Collateral, (1) until the earlier of (a) the Discharge of First Lien Obligations that are Senior Credit Facility Obligations and (b) the Non-Controlling Collateral Agent Enforcement Date, the Bank Collateral Agent and (2) from and after the earlier of (a) the Discharge of First Lien Obligations that are Senior Credit Facility Obligations and (b) the Non-Controlling Collateral Agent Enforcement Date, the Major Non-Controlling Collateral Agent.

"*Controlling Secured Parties*" means, with respect to any Shared Collateral, the Series of First Lien Secured Parties whose Collateral Agent is the Controlling Collateral Agent for such Shared Collateral.

"*Credit Facilities*" means, with respect to the Issuer or any of its Restricted Subsidiaries, one or more debt facilities (including, without limitation, the Senior Credit Facilities), or other financing arrangements (including, without limitation, commercial paper facilities with banks or other institutional lenders or investors or indentures) providing for revolving credit loans, term loans, letters of credit or other indebtedness, including any notes, mortgages, guarantees, collateral documents, instruments and agreements executed in connection therewith, and any amendments, supplements, modifications, extensions, renewals, restatements or refundings thereof, in whole or in part, and any indentures or credit facilities or commercial paper facilities with banks or other institutional lenders or investors that replace, refund, refinance, extend, renew, restate, amend, supplement or modify any part of the loans, notes, other credit facilities or commitments thereunder, including any such exchanged, replacement, refunding, refinancing, extended, renewed, restated, amended, supplemented or modified facility or indenture that increases the amount permitted to be borrowed or issued thereunder or alters the maturity thereof (*provided* that such increase in borrowings or issuance is permitted under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock") or adds Restricted Subsidiaries as additional borrowers or guarantors thereunder and whether by the same or any other agent, trustee, lender or group of lenders or other holders or investors.

"*Declined Proceeds*" has the meaning set forth under "Repurchase at the Option of Holders—Asset Sales."

"*Default*" means any event that is, or after notice or lapse of time or both would become, an Event of Default.

"*Delaware Divided LLC*" means any Delaware LLC which has been formed upon the consummation of a Delaware LLC Division.

"*Delaware LLC*" means any limited liability company organized or formed under the laws of the State of Delaware.

"*Delaware LLC Division*" means the statutory division of any Delaware LLC into two or more Delaware LLCs pursuant to Section 18-217 of the Delaware Limited Liability Company Act.

"*Derivative Instrument*" with respect to a Person, means any contract, instrument or other right to receive payment or delivery of cash or other assets to which such Person or any Affiliate of such Person that is acting in concert with such Person in connection with such Person's investment in the Notes (other than a Regulated Bank or Screened Affiliate) is a party (whether or not requiring further performance by such Person), the value and/or cash flows of which (or any material portion thereof) are materially affected by the value and/or performance of the Notes and/or the creditworthiness of the Issuer and/or any one or more of the Guarantors (the "Performance References").

"*Designated Non-cash Consideration*" means the fair market value of non-cash consideration received by the Issuer or a Restricted Subsidiary in connection with an Asset Sale that is so designated as Designated Non-cash Consideration pursuant to an Officer's Certificate, setting forth the basis of such valuation, less the amount of cash or Cash Equivalents received in connection with a subsequent sale, redemption or repurchase of or collection or payment on such Designated Non-cash Consideration. A particular item of Designated Non-Cash Consideration will no longer be considered to be outstanding when and to the extent it has been paid, redeemed or otherwise retired or sold or otherwise disposed of in exchange for consideration in the form of cash or Cash Equivalents in compliance with "Repurchase at the Option of Holders—Asset Sales."

"*Designated Preferred Stock*" means Preferred Stock of the Issuer, any Restricted Subsidiary or any Parent Entity (in each case other than Disqualified Stock) that is issued for cash (other than to a Restricted Subsidiary or an employee stock ownership plan or trust established by the Issuer or any of its Subsidiaries) and is so designated as Designated Preferred Stock, pursuant to an Officer's Certificate executed by the principal financial officer of the Issuer or the applicable Parent Entity, as the case may be, on the issuance date thereof, the cash proceeds of which are excluded from the calculation set forth in clause (3) of the first paragraph of "Certain Covenants—Limitation on Restricted Payments."

"*Discharge*" means, with respect to any Collateral, the date on which such Series of First Lien Obligations is no longer secured by such Collateral. The term "Discharged" shall have a corresponding meaning.

"*Discharge of First Lien Obligations*" means, with respect to any Collateral, the Discharge of the applicable First Lien Obligations with respect to such Collateral; *provided* that a Discharge of First Lien Obligations shall not be deemed to have occurred in connection with a refinancing of such First Lien Obligations with additional First Lien Obligations secured by such Collateral under an additional First Lien Document which has been designated in writing by the applicable Collateral Agent (under the First Lien Obligation so refinanced) or by the Issuer, in each case, to each other Collateral Agent as a "First Lien Obligation" for purposes of the First Lien Intercreditor Agreement.

"*Disqualified Stock*" means, with respect to any Person, any Capital Stock of such Person which, by its terms, or by the terms of any security into which it is convertible or for which it is putable or exchangeable, or upon the happening of any event, matures or is mandatorily redeemable (other than solely for Capital Stock of such Person or any Parent Entity thereof that would not otherwise constitute Disqualified Stock, and other than solely as a result of a change of control, asset sale, casualty, condemnation or eminent domain) pursuant to a sinking fund

obligation or otherwise, or is redeemable at the option of the holder thereof (other than solely as a result of a change of control, asset sale, casualty condemnation or eminent domain), in whole or in part, in each case prior to the date 91 days after the earlier of the maturity date of the Notes or the date the Notes are no longer outstanding; *provided*, *however*, that if such Capital Stock is issued to any plan for the benefit of employees of the Issuer or its Subsidiaries or by any such plan to such employees, such Capital Stock shall not constitute Disqualified Stock solely because it may be required to be repurchased by the Issuer or its Subsidiaries or a Parent Entity in order to satisfy applicable statutory or regulatory obligations or as a result of such employee's termination, death or disability; *provided*, *further*, that any Capital Stock held by any future, current or former employee, director, officer, member, partner, manager or consultant (or their respective Controlled Investment Affiliates or Immediate Family Members or any permitted transferee thereof) of the Issuer, any of its Subsidiaries or any Parent Entity or any other entity in which the Issuer or a Restricted Subsidiary has an Investment and is designated in good faith as an "*affiliate*" by the Board of the Issuer (or the compensation committee thereof) shall not constitute Disqualified Stock solely because it may be required to be repurchased by the Issuer or its Subsidiaries pursuant to any stockholders' agreement, management equity plan, stock option plan or any other management or employee benefit plan or agreement or in order to satisfy applicable statutory or regulatory obligations.

"*Dividing Person*" has the meaning set forth for such term in the definition of Division.

"*Division*" means the division of the assets, liabilities and/or obligations of a Person (the "Dividing Person") among two or more Persons (whether pursuant to a "plan of division" or similar arrangement), which may or may not include the Dividing Person and pursuant to which the Dividing Person may or may not survive.

"*Domestic Subsidiary*" means, with respect to any Person, any Restricted Subsidiary (other than a Foreign Subsidiary) of such Person that is organized or existing under the laws of the United States, any state thereof or the District of Columbia.

"*EMU*" means the economic and monetary union as contemplated in the Treaty on European Union.

"*Equityholding Vehicle*" means any Parent Entity of the Issuer and any equityholder thereof through which former, current officers or future officers, directors, employees, members, partners, managers or consultants of the Issuer or any of its Subsidiaries or Parent Entities hold Capital Stock of such Parent Entity.

"*Equity Interests*" means Capital Stock and all warrants, options or other rights to acquire Capital Stock, but excluding any debt security that is convertible into, or exchangeable for, Capital Stock.

"*Equity Offering*" means any public or private sale or issuance of common equity or Preferred Stock of the Issuer or any Parent Entity (excluding Disqualified Stock), other than:

(1) (i) public offerings with respect to the Issuer's or any of its Parent Entity's common stock registered on Form S-8 (or comparable form) or (ii) any sale or issuance pursuant to employee benefit plans or otherwise in compensation to officers, directors or employees;

(2) issuances to the Issuer or any Subsidiary of the Issuer; and

(3) any such public or private sale or issuance that constitutes an Excluded Contribution.

"*euro*" means the single currency of participating member states of the EMU.

"*Event of Default*" has the meaning set forth under "Events of Default and Remedies."

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder (and with respect to the definitions of "Change of Control" and "Permitted Holders" only, as in effect on the Issue Date).

"*Excluded Contribution*" means net cash proceeds, the fair market value of marketable securities or the fair market value of Qualified Proceeds received by the Issuer from:

(1) contributions to its common equity capital;

(2) dividends, distributions, fees and other payments from any Unrestricted Subsidiaries or joint ventures or Investments in entities that are not Restricted Subsidiaries; and

(3) the sale (other than to a Subsidiary of the Issuer or to any management equity plan or stock option plan or any other management or employee benefit plan or agreement of the Issuer) of Capital Stock (other than Disqualified Stock and Designated Preferred Stock) of the Issuer,

in each case designated as Excluded Contributions pursuant to an Officer's Certificate executed by the principal financial officer of the Issuer within 10 Business Days of the date such capital contributions are made, the date such dividends, distributions, fees or other payments are received or the date such Equity Interests are sold, as the case may be, which shall be excluded from the calculation set forth in clause (3) of the first paragraph under "Certain Covenants—Limitation on Restricted Payments;" *provided* that any such dividends, distributions, fees or other payments so designated pursuant to clause (2) of this definition shall be excluded from the definition of "Consolidated Net Income" for all purposes under the Indenture.

"*Excluded Subsidiary*" means (a) any Subsidiary that is not a wholly-owned direct or indirect Domestic Subsidiary of Holdings, (b) any Subsidiary that is prohibited or restricted by applicable law or by contractual obligations permitted by the Indenture in existence at the time of acquisition of such Subsidiary but not entered into in contemplation thereof, from guaranteeing the First Lien Notes Obligations or if guaranteeing the First Lien Notes Obligations would require governmental (including regulatory) consent, approval, license or authorization, unless such consent, approval, license or authorization has been received, or for which the provision of a Guarantee would result in material adverse tax consequences to the Issuer or one of its subsidiaries as reasonably determined by the Issuer and agreed in writing by the administrative agent under the Senior Credit Facilities, (c) any other Subsidiary with respect to which, in the reasonable judgment of the Issuer, the burden or cost of providing a Guarantee shall be excessive in view of the benefits to be obtained therefrom, (d) any not-for-profit Subsidiaries or captive insurance Subsidiaries, (e) any Unrestricted Subsidiaries, (f) any Securitization Subsidiary, (g) any direct or indirect Domestic Subsidiary of a direct or indirect Foreign Subsidiary of Holdings that is a CFC, (h) any direct or indirect Domestic Subsidiary of Holdings that is a FSHCO, (i) [reserved], (j) captive insurance Subsidiaries, (k) any Subsidiary that is not a Material Subsidiary and (l) any Restricted Subsidiary acquired pursuant to an acquisition permissible under the Indenture or other Investment that has assumed secured Indebtedness permitted under clause (18) under the heading "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" and not incurred in contemplation of such an acquisition or other Investment, in each case to the extent such secured Indebtedness prohibits such Subsidiary from becoming a Guarantor (so long as such prohibition is not incurred in contemplation of such acquisition or other Investment). For the avoidance of doubt, the Issuer shall not constitute an Excluded Subsidiary.

"*Existing Secured Notes*" means, collectively, (a) the 6.000% senior first lien notes due 2024 and (b) the 4.750% senior first lien notes due 2024, in each case, issued by the Issuer on October 2, 2017.

"*Existing Senior Notes*" means, collectively, the Existing Secured Notes and the Existing Unsecured Notes.

"*Existing Unsecured Notes*" collectively, (a) the 4.625% senior notes due 2028 and (b) the 3.875% senior notes due 2028, in each case, issued by the Issuer on July 17, 2020.

"*fair market value*" means, with respect to any Investment, asset, property or liability, the fair market value of such Investment, asset, property or liability as determined in good faith by the Board (or the senior management of the Issuer.

"*Financing Lease Obligation*" means, an obligation that is required to be accounted for as a financing lease (and, for the avoidance of doubt, not a straight-line or operating lease) on both the balance sheet and income

statement for financial reporting purposes in accordance with GAAP. At the time any determination thereof is to be made, the amount of the liability in respect of a financing or capital lease would be the amount required to be reflected as a liability on such balance sheet (excluding the footnotes thereto) in accordance with GAAP.

"*First Lien Documents*" means the indentures, credit, guarantee and security documents governing the First Lien Obligations.

"*First Lien Intercreditor Agreement*" has the meaning set forth under "Security for the Notes—First Lien Intercreditor Agreement."

"*First Lien Notes Obligations*" means Obligations in respect of the Notes, the Indenture, the Guarantees and the Security Documents relating to the Notes.

"*First Lien Obligations*" means, collectively, (1) the Senior Credit Facility Obligations, (2) the First Lien Notes Obligations and (3) each Series of Additional First Lien Obligations.

"*First Lien Secured Parties*" means (1) the Senior Credit Facility Secured Parties, (2) the Notes Secured Parties and (3) any Additional First Lien Secured Parties.

"*First Lien Security Documents*" means the Security Documents and any other agreement, document or instrument pursuant to which a Lien is granted or purported to be granted securing First Lien Obligations or under which rights or remedies with respect to such Liens are governed, in each case to the extent relating to the collateral securing the First Lien Obligations.

"*Fitch*" means Fitch Inc., a subsidiary of Fimalac, S.A., and any successor to its rating agency business

"*Fixed Charge Coverage Ratio*" means, with respect to any Person as of any Applicable Calculation Date, the ratio of Consolidated EBITDA of such Person for the Applicable Measurement Period to the Fixed Charges of such Person for such Applicable Measurement Period. In the event that such Person or any Restricted Subsidiary incurs, assumes, guarantees, redeems, repays, retires or extinguishes any Indebtedness or issues or redeems Disqualified Stock or Preferred Stock subsequent to the commencement of the Applicable Measurement Period but on or prior to the Applicable Calculation Date, then the Fixed Charge Coverage Ratio shall be calculated giving pro forma effect to such incurrence, assumption, guarantee, redemption, repayment, retirement or extinguishment of Indebtedness, or such issuance or redemption of Disqualified Stock or Preferred Stock (in each case, including a *pro forma* application of the net proceeds therefrom), as if the same had occurred at the beginning of the Applicable Measurement Period; *provided*, *however*, that the pro forma calculation shall not give effect to any Indebtedness incurred on such Applicable Calculation Date pursuant to the provisions described in the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock"; *provided*, *further*, that for purposes of the calculation of the Fixed Charge Coverage Ratio, in connection with the incurrence of any Indebtedness pursuant to the first paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," such Person may elect to treat an Elected Amount under any Indebtedness which is to be incurred (or any commitment thereunder), as being incurred as of the Applicable Calculation Date and (i) any subsequent incurrence of Indebtedness under such commitment that was so treated (so long as the total amount under such Indebtedness does not exceed the Elected Amount) shall not be deemed, for purposes of this calculation, to be an incurrence of additional Indebtedness at such subsequent time, (ii) such Person may revoke an election of an Elected Amount and (iii) for subsequent calculations of the Fixed Charge Coverage Ratio, the Elected Amount (if any) shall be deemed to be outstanding, whether or not such amount is actually outstanding.

For purposes of making the computation referred to above, Investments, acquisitions, dispositions, Divisions, mergers, amalgamations, consolidations and disposed operations (as determined in accordance with GAAP) and operational changes that have been made by the Issuer or any of its Restricted Subsidiaries during the Applicable Measurement Period or subsequent to such Applicable Measurement Period and on or prior to or simultaneously with the Applicable Calculation Date shall be calculated on a pro forma basis assuming that all such Investments, acquisitions, dispositions, Divisions, mergers, amalgamations, consolidations, disposed operations and

operational changes (and the change in any associated fixed charge obligations and the change in Consolidated EBITDA resulting therefrom) had occurred on the first day of the Applicable Measurement Period. If since the beginning of such period any Person that subsequently became a Restricted Subsidiary or was merged, amalgamated or consolidated with or into the Issuer or any of its Restricted Subsidiaries since the beginning of such period shall have made any Investment, acquisition, disposition, merger, amalgamation, consolidation, disposed operation (including any spin-off transaction) or operational change that would have required adjustment pursuant to this definition, then the Fixed Charge Coverage Ratio shall be calculated giving pro forma effect thereto for such Applicable Measurement Period as if such Investment, acquisition, disposition, Division, merger, amalgamation, consolidation, disposed operation or operational change had occurred at the beginning of the Applicable Measurement Period. For the avoidance of doubt, in the event that a Subsidiary was previously designated as an Unrestricted Subsidiary but was redesignated as a Restricted Subsidiary during or subsequent to the Applicable Measurement Period and is a Restricted Subsidiary as of the Applicable Calculation Date, the computation referred to above shall be calculated on a pro forma basis assuming that such redesignation as a Restricted Subsidiary (and the change in any associated fixed charge obligations and any change in Consolidated EBITDA resulting therefrom) had occurred on the first day of the Applicable Measurement Period.

For purposes of this definition, whenever pro forma effect is to be given to a transaction, the pro forma calculations shall be made in good faith by a responsible financial or accounting officer of the Issuer (and may include, for the avoidance of doubt and without duplication, cost savings, operating expense reductions and synergies resulting from any Asset Sale or other disposition or such Investment, acquisition, disposition, Division, merger, amalgamation or consolidation or other transaction, in each case calculated in accordance with and permitted by clause (2) of the definition of "Consolidated EBITDA" herein). If any Indebtedness bears a floating rate of interest and is being given pro forma effect, the interest on such Indebtedness shall be calculated as if the rate in effect on the Applicable Calculation Date had been the applicable rate for the entire period (taking into account any Hedging Obligations applicable to such Indebtedness). Interest on a Financing Lease Obligation shall be deemed to accrue at an interest rate reasonably determined by a responsible financial or accounting officer of the Issuer to be the rate of interest implicit in such Financing Lease Obligation in accordance with GAAP. For purposes of making the computation referred to above, interest on any Indebtedness under a revolving credit facility computed on a pro forma basis shall be computed based upon the average daily balance of such Indebtedness during the applicable period or, if lower, the maximum commitments under such revolving credit facility as of the Applicable Calculation Date. Interest on Indebtedness that may optionally be determined at an interest rate based upon a factor of a prime or similar rate, a eurocurrency interbank offered rate, or other rate, shall be deemed to have been based upon the rate actually chosen, or, if none, then based upon such optional rate chosen as the Issuer may designate.

"*Fixed Charges*" means, with respect to any Person for any period, the sum of (without duplication):

(1) Consolidated Interest Expense of such Person for such period;

(2) all cash dividends or other distributions paid (excluding items eliminated in consolidation) on any series of Preferred Stock during such period; and

(3) all cash dividends or other distributions paid (excluding items eliminated in consolidation) on any series of Disqualified Stock during such period.

"*Foreign Subsidiary*" means, with respect to any Person, any Restricted Subsidiary of such Person that is not organized or existing under the laws of the United States, any state or territory thereof or the District of Columbia and any Restricted Subsidiary of such Foreign Subsidiary.

"*FSHCO*" means any Domestic Subsidiary that has no material assets other than Equity Interests of one or more direct or indirect Subsidiaries that are CFCs.

"*GAAP*" means generally accepted accounting principles in the United States of America set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, which

are in effect from time to time; *provided* that unless the Issuer elects otherwise, as evidenced by a written notice of the Issuer to the Trustee, all terms of an accounting or financial nature used in the Indenture shall be construed, and all computations of amounts and ratios referred to in the Indenture shall be made (a) without giving effect to any election under FASB Accounting Standards Codification Topic 825—*Financial Instruments*, or any successor thereto (including pursuant to the FASB Accounting Standards Codification), to value any Indebtedness of the Issuer or any Subsidiary at "fair value," as defined therein and (b) the accounting for operating leases and financing or capital leases under U.S. GAAP as in effect on November 21, 2017 (including, without limitation, FASB Accounting Standards Codification Topic 840—*Leases*) shall apply for the purpose of determining compliance with the provisions of the Indenture, including the definition of Financing Lease Obligation. At any time after the Issue Date, the Issuer may elect to apply IFRS accounting principles in lieu of GAAP and, upon any such election, references herein to GAAP shall thereafter be construed to mean IFRS (except as otherwise provided in the Indenture); *provided* that any such election, once made, shall be irrevocable; *provided*, *further*, that any calculation or determination in the Indenture that requires the application of GAAP for periods that include fiscal quarters ended prior to the Issuer's election to apply IFRS shall remain as previously calculated or determined in accordance with GAAP. The Issuer shall give notice of any such election made in accordance with this definition to the Trustee. For the avoidance of doubt, solely making an election (without any other action) referred to in this definition will not be treated as an incurrence of Indebtedness.

For the avoidance of doubt, solely making an election (without any other action) referred to in this definition will not (1) be treated as an incurrence of Indebtedness or (2) have the effect of rendering invalid any Restricted Payment, Investment or other action made prior to the date of such election pursuant to the covenant described under "Certain Covenants—Limitation on Restricted Payments", any incurrence of Indebtedness incurred prior to the date of such election pursuant to the covenant described under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" or any incurrence of Liens pursuant to the covenant described under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" (or any other action conditioned on the Issuer and its Restricted Subsidiaries having been able to incur at least $1.00 of additional Indebtedness) if such Restricted Payment, Investment, incurrence or other action was valid under the Indenture on the date made, incurred or taken, as the case may be.

If there occurs or has occurred a change in generally accepted accounting principles and such change would cause a change in the method of calculation of any term or measure used in the Indenture or the indenture governing the Existing Unsecured Notes and such change would cause a change in the method of calculation of any term or measure used in the Indenture (an "*Accounting Change*"), then the Issuer may elect, as evidenced by a written notice of the Issuer to the Trustee, that such term or measure shall be calculated as if such Accounting Change had not occurred.

"*Government Securities*" means securities that are:

(1) direct obligations of the United States of America or any member nation of the European Union whose official currency is the euro, in each case, for the timely payment of which its full faith and credit is pledged; or

(2) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America or any member nation of the European Union whose official currency is the euro, in each case, the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States or such member nation, as applicable,

which, in either case, are not callable or redeemable at the option of the issuers thereof, and shall also include a depository receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act), as custodian with respect to any such Government Securities or a specific payment of principal of or interest on any such Government Securities held by such custodian for the account of the holder of such depository receipt; *provided* that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the Government Securities or the specific payment of principal of or interest on the Government Securities evidenced by such depository receipt.

"*Grantor*" means Holdings, the Issuer and any Subsidiary Guarantor.

"*guarantee*" means a guarantee (other than by endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner (including letters of credit and reimbursement agreements in respect thereof), of all or any part of any Indebtedness or other obligations.

"*Guarantee*" means the guarantee by any Guarantor of the Issuer's Obligations under the Indenture and the Notes.

"*Guarantor*" means, collectively, Holdings and each Subsidiary Guarantor.

"*Hedging Obligations*" means, with respect to any Person, the obligations of such Person with respect to (1) any rate swap transactions, basis swaps, credit derivative transactions, forward rate transactions, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward bond or forward bond price or forward bond index transactions, interest rate options, forward foreign exchange transactions, cap transactions, floor transactions, collar transactions, currency swap transactions, cross-currency rate swap transactions, currency options, spot contracts, or any other similar transactions or any combination of any of the foregoing (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement, and (2) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement, or any other master agreement (any such master agreement, together with any related schedules, a "*Master Agreement*"), including any such obligations or liabilities under any Master Agreement.

"*holder*" means, with reference to any Indebtedness or other Obligations, any holder or lender of, or trustee or collateral agent or other authorized representative with respect to, such Indebtedness or Obligations, and, in the case of Hedging Obligations, any counter-party to such Hedging Obligations.

"*Holder*" means the Person in whose name a Note is registered on the applicable registrar's books.

"*Holdings*" means Vail Holdco Sub LLC, a direct parent company of the Issuer.

"*IFRS*" means the international financial reporting standards and interpretations issued by the International Accounting Standards Board.

"*Immediate Family Members*" means with respect to any individual, such individual's child, stepchild, grandchild or more remote descendant, parent, stepparent, grandparent, spouse, former spouse, qualified domestic partner, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law (including adoptive relationships), and any trust, partnership or other bona fide estate-planning vehicle the only beneficiaries of which are any of the foregoing individuals or any private foundation, fund or trust that is controlled by any of the foregoing individuals or any donor-advised foundation, fund or trust of which any such individual is the donor.

"*Indebtedness*" means, with respect to any Person on any date of determination, the principal amount in respect of, without duplication:

(1) any indebtedness of such Person:

(a) in respect of borrowed money;

(b) evidenced by bonds, notes, debentures or other similar instruments or letters of credit or bankers' acceptances (or, without duplication, reimbursement agreements in respect thereof);

(c) representing any balance deferred and unpaid portion of the purchase price of any property (including pursuant to Financing Lease Obligations), except (i) any such balance that constitutes an obligation in respect of a commercial letter of credit, a trade payable or similar obligation to a trade creditor, in each case accrued in the ordinary course of business and (ii) any earn-out obligations until such obligation, if not paid within 60 days of becoming due and payable, is reflected as a liability on the balance sheet of such Person in accordance with GAAP; or

(d) representing the net obligations under any Hedging Obligations;

if and to the extent that any of the foregoing Indebtedness in clauses (a) through (d) (other than letters of credit and net obligations under any Hedging Obligations) would appear as a liability upon a balance sheet (excluding the footnotes thereto) of such Person prepared in accordance with GAAP; *provided* that (x) Indebtedness of any Parent Entity appearing on the balance sheet of the Issuer solely by reason of push-down accounting under GAAP and (y) Non-Financing Lease Obligations, straight-line leases and operating leases shall be excluded;

(2) to the extent not otherwise included, any obligation by such Person to be liable for, or to pay, as obligor, guarantor or otherwise, on the obligations of the type referred to in clause (1) of a third Person (whether or not such items would appear upon the balance sheet of such obligor or guarantor), other than by endorsement of negotiable instruments for collection in the ordinary course of business; and

(3) to the extent not otherwise included, the obligations of the type referred to in clause (1) of a third Person secured by a Lien on any assets owned by such first Person, whether or not such Indebtedness is assumed by such first Person; *provided*, *however*, that the amount of such Indebtedness will be the lesser of (a) the fair market value of such assets at such date of determination and (b) the amount of such Indebtedness of such other Person;

provided, *however*, that notwithstanding the foregoing, Indebtedness shall be deemed not to include (A) Contingent Obligations incurred in the ordinary course of business, (B) accrued expenses and royalties, (C) obligations under or in respect of operating leases or Sale and Lease-Back Transactions (except any resulting Financing Lease Obligations) and Permitted Receivables Financing, (D) asset retirement obligations and obligations in respect of reclamation and workers' compensation (including pensions and retiree medical care) that are not overdue by more than 90 days or (E) any amounts payable or other liabilities to trade creditors (including undrawn letters of credit) arising in the ordinary course of business.

For all purposes hereof, the Indebtedness of the Issuer and its Restricted Subsidiaries shall exclude intercompany liabilities arising from their cash management and accounting operations and advances having a term not exceeding 364 days (inclusive of any rollover or extensions of terms) and made in the ordinary course of business.

"*Independent Financial Advisor*" means an accounting, appraisal, investment banking firm or consultant to Persons of nationally recognized standing that is, in the good faith judgment of the Issuer, qualified to perform the task for which it has been engaged.

"*Investment Grade Rating*" means a rating equal to or higher than Baa3 (or the equivalent) by Moody's and BBB- (or the equivalent) by S&P or the equivalent investment grade rating from any other Rating Agency.

"*Investment Grade Securities*" means:

(1) securities issued or directly and fully guaranteed or insured by the U.S. government or any agency or instrumentality thereof (other than Cash Equivalents);

(2) debt securities or debt instruments with an Investment Grade Rating, but excluding any debt securities or instruments constituting loans or advances among the Issuer and its Subsidiaries;

(3) investments in any fund that invests at least 90% of its assets in investments of the type described in clauses (1) and (2) which fund may also hold immaterial amounts of cash pending investment or distribution; and

(4) corresponding instruments in countries other than the United States customarily utilized for high-quality investments.

"*Investments*" means, with respect to any Person, all investments by such Person in other Persons (including Affiliates) in the form of loans (including guarantees), advances or capital contributions (excluding accounts receivable, trade credit, advances to customers, commission, travel and similar advances to officers, directors, managers, members, partners, employees and consultants, in each case made in the ordinary course of business or consistent with past practice), purchases or other acquisitions for consideration of Indebtedness, Equity Interests or other securities issued by any other Person and investments that are required by GAAP to be classified on the balance sheet (excluding the footnotes) of the Issuer in the same manner as the other investments included in this definition to the extent such transactions involve the transfer of cash or other property. For purposes of the definition of "Unrestricted Subsidiary" and the covenant described under "Certain Covenants—Limitation on Restricted Payments:"

(1) "Investments" shall include the portion (proportionate to the Issuer's equity interest in such Subsidiary) of the fair market value of the net assets of a Subsidiary of the Issuer at the time that such Subsidiary is designated an Unrestricted Subsidiary; *provided*, *however*, that upon a redesignation of such Subsidiary as a Restricted Subsidiary, the Issuer shall be deemed to continue to have a permanent "Investment" in an Unrestricted Subsidiary in an amount (if positive) equal to:

(a) the Issuer's "Investment" in such Subsidiary at the time of such redesignation; less

(b) the portion (proportionate to the Issuer's equity interest in such Subsidiary) of the fair market value of the net assets of such Subsidiary at the time of such redesignation;

(2) any property transferred to or from an Unrestricted Subsidiary shall be valued at its fair market value at the time of such transfer, in each case as determined by the Issuer; and

(3) if the Issuer or any Restricted Subsidiary issues, sells or otherwise disposes of any Capital Stock of a Person that is a Restricted Subsidiary such that, after giving effect thereto, such Person is no longer a Restricted Subsidiary, any investment by the Issuer or any Restricted Subsidiary in such Person remaining after giving effect thereto shall not be deemed to be an Investment at such time.

The amount of any Investment outstanding at any time shall be the original cost of such Investment, reduced by any dividend, distribution, interest payment, return of capital, repayment or other amount received in cash or Cash Equivalents by the Issuer or a Restricted Subsidiary in respect of such Investment.

"*Investors*" means each of New Mountain Capital LLC and its Affiliates (including the funds, partnerships or other co-investment vehicles managed, advised or controlled thereby but other than, in each case, Parent and its Subsidiaries or any portfolio company).

"*Issue Date*" means , 2020.

"*Junior Lien Priority*" means Indebtedness that is secured by a Lien on the Collateral that are junior in priority to the Liens on the Collateral securing the First Lien Note Obligations and is subject to a Second Lien Intercreditor Agreement (it being understood that junior Liens are not required to rank equally and ratably with other junior Liens, and that Indebtedness secured by junior Liens may be secured by Liens that are senior in priority to, or rank equally and ratably with, or junior in priority to, other Liens constituting junior Liens).

"*Legal Holiday*" means a Saturday, a Sunday or a day on which commercial banking institutions are not required or authorized to be open in the State of New York or, with respect to any payments to be made on the Notes, the place of payment.

"*Lien*" means, with respect to any asset, any mortgage, lien (statutory or otherwise), pledge, hypothecation, charge, security interest, preference, priority or encumbrance of any kind in respect of such asset, whether or not filed, recorded, registered, published or otherwise perfected under applicable law, including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell or give a security interest in and any filing of or agreement to give any financing statement under the Uniform Commercial Code (or equivalent statutes) of any jurisdiction; *provided* that in no event shall a Non-Financing Lease Obligation be deemed to constitute a Lien.

"*Limited Condition Acquisition*" means any acquisition or Investment, including by way of merger, amalgamation, consolidation, Division or similar transaction (i) by the Issuer or one or more of its Restricted Subsidiaries (or any successor of the Issuer or of such Restricted Subsidiary) or (ii) of the Issuer or one or more of its Restricted Subsidiaries, in each case, whose consummation is not conditioned upon the availability of, or on obtaining, third-party financing.

"*Long Derivative Instrument*" means a Derivative Instrument (i) the value of which generally increases, and/or the payment or delivery obligations under which generally decrease, with positive changes to the Performance References and/or (ii) the value of which generally decreases, and/or the payment or delivery obligations under which generally increase, with negative changes to the Performance References.

"*Management Investors*" means those former or current officers, directors, members, partners, employees and managers (and Controlled Investment Affiliates and Immediate Family Members of the foregoing) of the Issuer, any Restricted Subsidiary or any Parent Entity of the Issuer who are direct or indirect investors in the Issuer, any Parent Entity of the Issuer or any Equityholding Vehicle as of the Issue Date, including any such officers, directors, members, partners, employees and managers owning through an Equityholding Vehicle.

"*Market Capitalization*" means an amount equal to (i) the total number of issued and outstanding shares of common Equity Interests of the Issuer or its Parent Entity that are traded on a securities exchange on the date of the declaration of a Restricted Payment permitted pursuant to clause (8) of the third paragraph under the covenant described in "Certain Covenants—Limitations on Restricted Payments," multiplied by (ii) the arithmetic mean of the closing prices per share of such common Equity Interests on the principal securities exchange on which such common Equity Interests are traded for the 30 consecutive trading days immediately preceding the date of declaration of such Restricted Payment.

"*Material Domestic Subsidiary*" has the meaning set forth in the Senior Credit Facilities.

"*Material Foreign Subsidiary*" has the meaning set forth in the Senior Credit Facilities.

"*Material Real Property*" means any fee-owned real property (other than the Phillipsburg Real Property) located in the United States that is owned by any Grantor and that has a fair market value in excess of $50,000,000 (with respect to fee-owned real property acquired after November 21 2017, at the time of acquisition, in each case, as reasonably estimated by the Issuer in good faith).

"*Material Subsidiary*" means, at any date of determination, any Material Domestic Subsidiary or any Material Foreign Subsidiary.

"*Moody's*" means Moody's Investors Service, Inc. and any successor to its rating agency business.

"*Mortgages*" means collectively, the deeds of trust, trust deeds, deeds to secure debt, hypothecs, assignments of leases and rents, and mortgages made by the Grantors in favor or for the benefit of the Notes Collateral Agent creating and evidencing a Lien on a Mortgaged Property to secure the First Lien Notes Obligations. Each Mortgage shall be in form and substance reasonably satisfactory to the Issuer, and including such provisions as

shall be necessary to conform such document to applicable local law and any other mortgages executed and delivered pursuant to the Security Documents or delivered to the Bank Collateral Agent, in each case, as the same may from time to time be amended, restated, supplemented or otherwise modified.

"*Mortgaged Property*" means each Material Real Property with respect to which a Mortgage is granted pursuant to the terms of the Indenture and/or the Security Documents.

"*Net Income*" means, with respect to any Person, the net income (loss) attributable to such Person and its Restricted Subsidiaries, determined on a consolidated basis in accordance with GAAP and before any reduction in respect of Preferred Stock (other than Disqualified Stock) dividends.

"*Net Proceeds*" means the aggregate cash proceeds and fair market value of any Cash Equivalents received by the Issuer or any of its Restricted Subsidiaries in respect of any Asset Sale, including any cash or Cash Equivalents received upon the sale or other disposition of any Designated Non-cash Consideration received in any Asset Sale, net of (1) the fees, out-of-pocket expenses and other direct costs relating to such Asset Sale or the sale or disposition of such Designated Non-cash Consideration (including, without limitation, legal, accounting, consulting, investment banking and other customary fees, underwriting discounts and commissions, survey costs, title and recordation expenses, title insurance premiums, payments made in order to obtain a necessary consent or required by applicable law, brokerage and sales commissions and any relocation expenses incurred as a result thereof), (2) all federal, state, provincial, foreign and local taxes paid or reasonably estimated to be payable as a result thereof or any transactions occurring or deemed to occur to effectuate a payment under the Indenture (including transfer taxes, deed or mortgage recording taxes and estimated taxes payable in connection with any repatriation of funds and after taking into account any available tax credits or deductions and any tax sharing arrangements), (3) amounts required to be applied to the repayment of principal, premium, if any, and interest on Indebtedness secured by a Lien on the asset being sold (other than any First Lien Obligations or other Obligations or Indebtedness secured by a junior Lien on the Collateral) required (other than required by the second paragraph under "Repurchase at the Option of Holders—Asset Sales") to be paid as a result of such transaction, (4) the pro rata portion of Net Proceeds thereof (calculated without regard to this clause (4)) attributable to minority interests and not available for distribution to or for the account of the Issuer and its Restricted Subsidiaries as a result thereof, (5) any costs associated with unwinding any related Hedging Obligations in connection with such transaction, (6) any deduction of appropriate amounts to be provided by the Issuer or any of its Restricted Subsidiaries as a reserve in accordance with GAAP against any liabilities associated with the asset disposed of in such transaction and retained by the Issuer or any of its Restricted Subsidiaries after such sale or other disposition thereof, including pension and other post-employment benefit liabilities and liabilities related to environmental matters or against any indemnification obligations associated with such transaction, (7) any portion of the purchase price from an Asset Sale placed in escrow, whether as a reserve for adjustment of the purchase price, for satisfaction of indemnities in respect of such Asset Sale or otherwise in connection with such Asset Sale; *provided* that, upon the termination of that escrow (other than in connection with a payment in respect of any such adjustment or satisfaction of indemnities), Net Proceeds will be increased by any portion of funds in the escrow that are released to the Issuer or any of its Restricted Subsidiaries and (8) the amount of any liabilities (other than Indebtedness in respect of the Senior Credit Facilities, the Existing Unsecured Notes and the Notes) directly associated with such asset being sold and retained by the Issuer or any of its Restricted Subsidiaries. Any non-cash consideration received in connection with any Asset Sale that is subsequently converted to cash shall become Net Proceeds only at such time as it is so converted.

"*Net Short*" means, with respect to a Holder or beneficial owner, as of a date of determination, either (i) the value of its Short Derivative Instruments exceeds the sum of (x) the value of its Notes plus (y) the value of its Long Derivative Instruments as of such date of determination or (ii) it is reasonably expected that such would have been the case were a "Failure to Pay" or "Bankruptcy Credit Event" (each as defined in the 2014 ISDA Credit Derivatives Definitions) to have occurred with respect to any Issuer or any Guarantor immediately prior to such date of determination.

"*Non-Financing Lease Obligation*" means a lease obligation that is not required to be accounted for as a financing or capital lease on both the balance sheet and the income statement for financial reporting purposes in accordance with GAAP. For the avoidance of doubt, a straight-line or operating lease shall be considered a Non-Financing Lease Obligation.

"*Non-Recourse Indebtedness*" means Indebtedness that is non-recourse to the Issuer and the Restricted Subsidiaries (except for any customary limited recourse that is applicable only to Subsidiaries that are not a Subsidiary Guarantor that is customary in the relevant local market, and reasonable extensions thereof).

"*Non-Controlling Collateral Agent*" means, at any time with respect to any Shared Collateral, any Collateral Agent that is not the Controlling Collateral Agent at such time with respect to such Shared Collateral.

"*Non-Controlling Collateral Agent Enforcement Date*" has the meaning set forth under "Security—First Lien Intercreditor Agreement."

"*Non-Controlling Secured Parties*" means, with respect to any Shared Collateral, the First Lien Secured Parties which are not Controlling Secured Parties with respect to such Shared Collateral.

"*Notes Collateral Agent*" means The Bank of New York Mellon Trust Company, N.A., as collateral agent for the holders of the First Lien Notes Obligations under the Security Documents and any successor pursuant to the provisions of the Indenture and the Security Documents.

"*Notes Secured Parties*" means the Trustee, the Notes Collateral Agent and the Holders of the Notes.

"*Obligations*" means any principal, interest, fees, expenses (including any interest, fees and expenses accruing on or subsequent to the filing of a petition in bankruptcy, reorganization or similar proceeding at the rate provided for in the documentation with respect thereto, whether or not such interest, fees or expenses is an allowed claim under applicable state, provincial, federal or foreign law), premium, penalties, indemnifications, reimbursements (including reimbursement obligations with respect to letters of credit and bankers' acceptances), damages and other liabilities, and guarantees of payment of such principal, interest, premium, penalties, fees, indemnifications, reimbursements, damages and other liabilities, payable under the documentation governing any Indebtedness; *provided* that any of the foregoing (other than principal and interest) shall no longer constitute "Obligations" after payment in full of such principal and interest except to the extent such obligations are fully liquidated and non-contingent on or prior to such payment in full; *provided*, *further*, that Obligations with respect to the Notes shall include fees, reimbursements or indemnifications in favor of the Trustee (which obligations with respect to such fees, reimbursements or indemnifications shall survive the payment in full of the principal of and interest on the Notes) or other third parties other than the Holders.

"*Offering Circular*" means the Offering Circular dated , 2020 relating to the offering of the Notes.

"*Officer*" means the Chairman of the Board, any Manager or Director, the Chief Executive Officer, the Chief Financial Officer, the Chief Operating Officer, the President, any Executive Vice President, Senior Vice President or Vice President, the Treasurer, the Controller or the Secretary or any other officer designated by any such individuals of the Issuer or any other Person, as the case may be.

"*Officer's Certificate*" means a certificate signed on behalf of the Issuer by an Officer of the Issuer or on behalf of any other Person, as the case may be, that meets the requirements set forth in the Indenture.

"*Opinion of Counsel*" means a written opinion from legal counsel who is reasonably acceptable to the Trustee (which opinion may be subject to customary assumptions and exclusions); such legal counsel may be an employee of or counsel to the Issuer.

"*Parent*" means Avantor, Inc., a Delaware corporation and an indirect parent company of the Issuer.

"*Parent Entity*" means any Person that, with respect to another Person, owns 50% or more of the total voting power of the Voting Stock entitled to vote for the election of directors of such other Person having a majority of the aggregate votes on the Board of such other Person. Unless the context otherwise requires, any references to Parent Entity refer to a Parent Entity of the Issuer.

"*Pari Passu Lien Priority*" means, relative to specified Indebtedness, having equal Lien priority on specified Collateral and subject to the First Lien Intercreditor Agreement.

"*Performance References*" has the meaning set forth for such term in the definition of Derivative Instrument.

"*Permitted Asset Swap*" means the substantially concurrent purchase and sale or exchange, including as a deposit for future purchases, of Related Business Assets or a combination of Related Business Assets and cash or Cash Equivalents between the Issuer or any of its Restricted Subsidiaries and another Person; *provided* that any cash or Cash Equivalents received must be applied in accordance with the "—Repurchase at the Option of Holders—Asset Sales" covenant.

"*Permitted Holders*" means (1) each of the Investors, the Management Investors (including any Management Investors holding Equity Interests through an Equityholding Vehicle) and any group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act) of which any of the foregoing, any Permitted Parent or any Permitted Holder specified in the last sentence of this definition are members and any member of such group; *provided* that, in the case of such group and any member of such group and without giving effect to the existence of such group or any other group, such Investors, Management Investors (including such Equityholding Vehicle), Permitted Parent and Person or group specified in the last sentence of this definition, collectively, own, directly or indirectly, more than 50% of the total voting power of the Voting Stock entitled to vote for the election of the directors of the Issuer having a majority of the aggregate votes on the Board of the Issuer held by such group, (2) any Permitted Parent and (3) any Permitted Plan. Any Person or group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act) whose acquisition of beneficial ownership or assets or properties of the Issuer constitutes a Change of Control in respect of which a Change of Control Offer is made or waived in accordance with the requirements of the Indenture will thereafter, together with its Affiliates, constitute an additional Permitted Holder.

"*Permitted Investments*" means:

(1) any Investment in the Issuer or any of its Restricted Subsidiaries (including guarantees of obligations of its Restricted Subsidiaries);

(2) any Investment in cash and Cash Equivalents or Investment Grade Securities;

(3) any Investment by the Issuer or any of its Restricted Subsidiaries in a Person (including, to the extent constituting an Investment, in assets of a Person that represent substantially all of its assets or a division, business unit, product line or line of business, including research and development and related assets in respect of any product) that is engaged, directly or indirectly, in a Similar Business if as a result of such Investment:

(a) such Person becomes a Restricted Subsidiary (including by redesignation of an Unrestricted Subsidiary as a Restricted Subsidiary or by means of a Division); or

(b) such Person, in one transaction or a series of related transactions, is merged, amalgamated or consolidated with or into, or transfers or conveys substantially all of its assets (or such division, business unit, product line or business) to, or is liquidated into, the Issuer or a Restricted Subsidiary,

and, in each case, any Investment held by such Person; *provided* that such Investment was not acquired by such Person in contemplation of such acquisition, merger, amalgamation, Division, consolidation, transfer or conveyance;

(4) any Investment in securities or other assets (including earn-outs) not constituting cash, Cash Equivalents or Investment Grade Securities and received in connection with an Asset Sale made pursuant to the provisions of "—Repurchase at the Option of Holders—Asset Sales" or any other disposition of assets not constituting an Asset Sale;

(5) any Investment existing on the Issue Date or made pursuant to binding commitments in effect on the Issue Date or an Investment, consisting of any extension, modification, replacement, reinvestment or renewal of any such Investment existing on the Issue Date or binding commitment in effect on the Issue Date; *provided* that the amount of any such Investment may be increased in such extension, modification, replacement, reinvestment or renewal only (a) as required by the terms of such Investment or binding commitment as in existence on the Issue Date (including as a result of the accrual or accretion of interest or original issue discount or the issuance of pay-in-kind securities) or (b) as otherwise permitted under the Indenture;

(6) any Investment acquired by the Issuer or any of its Restricted Subsidiaries:

(i) in exchange for any other Investment or accounts receivable, endorsements for collection or deposit held by the Issuer or any Restricted Subsidiary in connection with or as a result of a bankruptcy, workout, reorganization or recapitalization of the issuer of such other Investment or accounts receivable;

(ii) in satisfaction of judgments against other Persons;

(iii) as a result of a foreclosure by the Issuer or any of its Restricted Subsidiaries with respect to any secured Investment or other transfer of title with respect to any secured Investment in default; or

(iv) received in compromise or resolution of (A) obligations of trade creditors, suppliers or customers that were incurred in the ordinary course of business of the Issuer or any Restricted Subsidiary or consistent with past practice, including pursuant to any plan of reorganization or similar arrangement upon the bankruptcy or insolvency of any trade creditor, supplier or customer, or (B) litigation, arbitration or other disputes;

(7) Hedging Obligations permitted under clause (10) of the second paragraph of the covenant described in "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;"

(8) any Investment (a) in a Similar Business having an aggregate fair market value (with the fair market value of such Investment being measured at the time of committing, declaring or determining to make such Investment and without giving effect to subsequent changes in value), taken together with all other Investments made pursuant to this clause (8) that are at that time outstanding, not to exceed at the time of such Investment the greater of (x) $385.0 million and (y) 35.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period and (b) without duplication with clause (a), in an amount equal to the net cash proceeds from any sale or disposition of, or any distribution in respect of, Investments acquired after the Issue Date, to the extent the acquisition of such Investments was financed in reliance on clause (a) and provided that such amount will not increase the amount available for Restricted Payments under clause (3) of the first paragraph under the covenant described in "Certain Covenants—Limitations on Restricted Payments;" *provided*, *however*, that if any Investment pursuant to this clause (8) is made in any Person that is not a Restricted Subsidiary of the Issuer at the date of the making of such Investment and such Person becomes a Restricted Subsidiary after such date, such investment shall thereafter be deemed to have been made pursuant to clause (1) above and shall cease to have been made pursuant to this clause (8) for so long as such Person continues to be a Restricted Subsidiary;

(9) Investments the payment for which consists of Equity Interests (exclusive of Disqualified Stock) of the Issuer or any Parent Entity; *provided*, *however*, that such Equity Interests will not increase the amount available for Restricted Payments under clause (3) of the first paragraph under the covenant described in "Certain Covenants—Limitations on Restricted Payments;"

(10) Investments consisting of (but not, for the avoidance of doubt, dividends deemed to be made as a result of) guarantees of Indebtedness permitted under the covenant described in "Certain

Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock," performance guarantees and Contingent Obligations incurred in the ordinary course of business or consistent with past practice and the creation of Liens on the assets of the Issuer or any Restricted Subsidiary in compliance with the covenant described under "Certain Covenants—Liens;"

(11) any transaction to the extent it constitutes an Investment that is permitted by and made in accordance with the provisions of the second paragraph of the covenant described under "Certain Covenants—Transactions with Affiliates" (except transactions described in clauses (2), (5), (9) and (15) of such paragraph);

(12) any Investments consisting of purchases and acquisitions of inventory, supplies, material or equipment or other similar assets, or the licensing or contribution of intellectual property pursuant to joint marketing arrangements with other Persons;

(13) additional Investments (a) having an aggregate fair market value (with the fair market value of each Investment being measured at the time of committing, declaring or determining to make such Investment and without giving effect to subsequent changes in value), taken together with all other Investments made pursuant to this clause (13) that are at that time outstanding (without giving effect to the sale of an Unrestricted Subsidiary to the extent the proceeds of such sale do not consist of cash or marketable securities), not to exceed at the time of such Investment the greater of (x) $1,100.0 million and (y) 100.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period and (b) without duplication with clause (a), in an amount equal to the net cash proceeds from any sale or disposition of, or any distribution in respect of, Investments acquired after the Issue Date, to the extent the acquisition of such Investments was financed in reliance on clause (a) and provided that such amount will not increase the amount available for Restricted Payments under clause (3) of the first paragraph under the covenant described in "Certain Covenants—Limitations on Restricted Payments;" *provided*, *however*, that if any Investment pursuant to this clause (13) is made in any Person that is not a Restricted Subsidiary at the date of the making of such Investment and such Person becomes a Restricted Subsidiary after such date, such Investment shall thereafter be deemed to have been made pursuant to clause (1) above and shall cease to have been made pursuant to this clause (13) for so long as such Person continues to be a Restricted Subsidiary;

(14) Investments in Receivables Subsidiaries in the form of assets required in connection with a Permitted Receivables Financing (including the contribution or lending of cash and Cash Equivalents to Subsidiaries to finance the purchase of such assets from the Issuer or any Restricted Subsidiary or to otherwise fund required reserves);

(15) loans and advances to, or guarantees of Indebtedness of, officers, directors, members, partners, managers, employees and consultants not in excess of $55.0 million in the aggregate, outstanding at the time of such Investment;

(16) loans and advances to officers, directors, managers, members, partners, employees and consultants for business-related travel expenses, moving or relocation expenses, entertainment, payroll advances and other analogous or similar expenses or payroll expenses, in each case incurred in the ordinary course of business or consistent with past practice, or to fund such Person's purchase of Equity Interests of the Issuer or any Parent Entity;

(17) advances, loans or extensions of trade credit (including the creation of receivables) or prepayments to suppliers or lessors or loans or advances made to distributors, and performance guarantees and Contingent Obligations incurred in the ordinary course of business or consistent with past practice;

(18) Investments consisting of purchases and acquisitions of assets or services in the ordinary course of business or consistent with past practice and any earnest money deposits in connection therewith;

(19) repurchases of the Notes or the Existing Senior Notes;

(20) Investments in the ordinary course of business or consistent with past practice consisting of Uniform Commercial Code Article 3 endorsements for collection or deposit and Article 4 customary trade arrangements with customers consistent with past practices;

(21) Investments in Unrestricted Subsidiaries having an aggregate fair market value (with the fair market value of such Investment being measured at the time of committing, declaring or determining to make such Investment and without giving effect to subsequent changes in value), taken together with all other Investments made pursuant to this clause (21) that are at the time outstanding, without giving effect to the sale of an Unrestricted Subsidiary to the extent the proceeds of such sale do not consist of cash or marketable securities, not to exceed at the time of such Investment the greater of (x) $225.0 million and (y) 20.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period; *provided*, *however*, that any Investment pursuant to this clause (21) made in any Person that is a Unrestricted Subsidiary of the Issuer at the date of the making of such Investment and such Person becomes a Restricted Subsidiary after such date, such Investment shall thereafter be deemed to have been made pursuant to clause (1) above and shall cease to have been made pursuant to this clause (21) for so long as such Person continues to be a Restricted Subsidiary;

(22) Investments consisting of promissory notes issued to the Issuer or any Guarantor by future, present or former employees, directors, officers, managers or consultants of the Issuer or any of its Subsidiaries or their respective estates, spouses or former spouses to finance the purchase or redemption of Equity Interests of the Issuer or any Parent Entity thereof, to the extent the applicable Restricted Payment is permitted by the covenant described under "—Certain Covenants—Limitation on Restricted Payments;"

(23) Investments of assets relating to non-qualified deferred payment plans in the ordinary course of business or consistent with past practice;

(24) intercompany current liabilities owed to Unrestricted Subsidiaries or joint ventures incurred in the ordinary course of business or consistent with past practice in connection with cash management operations of the Issuer and its Subsidiaries;

(25) any Investment in any Subsidiary or any joint venture in connection with intercompany cash management arrangements or related activities arising in the ordinary course of business or consistent with past practice;

(26) contributions to a "rabbi" trust for the benefit of employees, directors, members, partners, managers, consultants, independent contractors or other service providers or other grantor trust subject to claims of creditors in the case of a bankruptcy of the Issuer or any Restricted Subsidiary;

(27) non-cash Investments in connection with tax planning and reorganization activities; *provided* that such Investments do not adversely affect the legal rights of the Holders under the Indenture in any material respect; and

(28) any other Investment; *provided* that on a pro forma basis after giving effect to such Investment the Consolidated Total Debt Ratio for the Applicable Measurement Period would be equal to or less than 5.00 to 1.00.

"*Permitted Liens*" means, with respect to any Person:

(1) Liens for taxes, assessments or other governmental charges that are not overdue for a period of more than 60 days or not yet payable or subject to penalties for nonpayment or that are being contested in good faith by appropriate actions diligently conducted, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP, or for property taxes on property that the Issuer or one of its Subsidiaries has determined to abandon if the sole recourse for such tax, assessment, charge, levy or claim is to such property;

(2) Liens imposed by law or regulation, such as landlords', carriers', warehousemen's, mechanics', materialmen's, repairmen's, architect's or construction contractors' Liens and other similar Liens that secure amounts not overdue for a period of more than 60 days or, if more than 60 days overdue, are unfiled and no other action has been taken to enforce such Liens or that are being contested in good faith by appropriate actions or other Liens arising out of judgments or awards against such Person with respect to which such Person shall then be proceeding with an appeal or other proceeding for review, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;

(3) Liens incurred or deposits made in the ordinary course of business or consistent with past practice (a) in connection with workers' compensation, unemployment insurance, employers' health tax, and other social security or similar legislation or other insurance related obligations (including, but not limited to, in respect of deductibles, self-insured retention amounts and premiums and adjustments thereto) and (b) securing reimbursement or indemnification obligations of (including obligations in respect of letters of credit or bank guarantees or similar instruments for the benefit of) insurance carriers providing property, casualty or liability insurance to such Person or otherwise supporting the payment of items set forth in the foregoing clause (a);

(4) Liens incurred or deposits made to secure the performance of bids, tenders, trade contracts, governmental contracts, leases, public or statutory obligations, surety, indemnity, warranty, release, appeal or similar bonds or with respect to other regulatory requirements, completion guarantees, stay, customs and appeal bonds, performance bonds, bankers acceptance facilities and other obligations of a like nature (including those to secure health, safety and environmental obligations), deposits as security for contested taxes or import duties or for payment of rent, performance and return of money bonds and obligations in respect of letters of credit, bank guarantees or similar instruments that have been posted to support the same, incurred in the ordinary course of business or consistent with past practice;

(5) minor survey exceptions, minor encumbrances, easements or reservations of, or rights of others for, rights-of-way, restrictions, encroachments, protrusions, servitudes, sewers, electric lines, drains, telegraph, telephone, internet and cable television lines and other similar purposes, or zoning, building codes or other restrictions (including minor defects and irregularities in title and similar encumbrances) affecting real properties or Liens incidental to the conduct of the business of the Issuer and its Subsidiaries or to the ownership of their respective properties which were not incurred in connection with Indebtedness and which do not in any case materially interfere with the ordinary conduct of the business of the Issuer and its Restricted Subsidiaries, taken as a whole;

(6) Liens securing, or otherwise arising from, judgments not constituting an Event of Default under clause (5) under "—Event of Default and Remedies;"

(7) Liens on goods the purchase price of which is financed by a documentary letter of credit issued for the account of the Issuer or any of its Restricted Subsidiaries or Liens on bills of lading, drafts or other documents of title arising by operation of law or pursuant to the standard terms of agreements relating to letters of credit, bank guarantees and other similar instruments, *provided* that such Lien secures only the obligations of the Issuer or such Restricted Subsidiaries in respect of such letter of credit to the extent such obligations are permitted under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" and Liens on specific items of inventory or other goods and proceeds of any Person securing such Person's accounts payable or similar trade obligations in respect of bankers' acceptances or documentary or trade letters of credit issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods;

(8) rights of set-off, banker's liens, netting agreements and other Liens arising by operation of law or by the terms of documents of banks or other financial institutions in relation to the maintenance of administration of deposit accounts, securities accounts, cash management arrangements or in connection with the issuance of letters of credit, bank guarantees or other similar instruments;

(9) Liens arising from Uniform Commercial Code financing statements, including precautionary financing statements, or any similar filings made in respect of operating leases or consignments entered into by the Issuer or any of its Restricted Subsidiaries;

(10) Liens securing Indebtedness permitted to be incurred under Credit Facilities, including any letter of credit facility relating thereto, that was, at the time such Indebtedness is deemed to be incurred, permitted or deemed to be permitted by the terms of the Indenture to be incurred pursuant to clause (1) of the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" (including for the avoidance of doubt, Liens to secure the Notes to the extent incurred pursuant to such clause (1) and the Guarantees thereof; *provided* that if any such Indebtedness has Pari Passu Lien Priority relative to the Notes with respect to the Collateral then it shall not be secured by any other assets that do not constitute Collateral;

(11) Liens existing on the Issue Date (other than Liens incurred in connection with the Senior Credit Facilities);

(12) Liens securing Indebtedness permitted to be incurred pursuant to clauses (4), (13), (14), (15), (18), (27) and (30) of the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" *provided* that (a) Liens securing Indebtedness permitted to be incurred pursuant to such clause (4) extend only to the assets purchased with the proceeds of such Indebtedness, accessions to such assets and the proceeds and products thereof, and any lease of such assets (including accessions thereto) and the proceeds and the products thereof and customary security deposits in respect thereof; *provided*, *further*, that individual financings of equipment provided by one lender may be cross collateralized to other financings of equipment provided by such lender; (b) Liens securing Indebtedness permitted to be incurred pursuant to such clause (14) shall only be permitted if (A) such Liens are limited to all or part of the same property or assets, including Capital Stock (plus improvements, accessions, proceeds or dividends or distributions in respect thereof, or replacements of any thereof) acquired, or of any Person acquired or merged, amalgamated or consolidated with or into the Issuer or any Restricted Subsidiary (including designating an Unrestricted Subsidiary as a Restricted Subsidiary), in any transaction to which such Indebtedness relates or (B) after giving pro forma effect to the incurrence or issuance of Indebtedness, Disqualified Stock or Preferred Stock permitted under such clause (14), in the case of First Lien Obligations, the Consolidated First Lien Debt Ratio would be no greater than (i) 5.00 to 1.00 or (ii) the Consolidated First Lien Debt Ratio immediately prior to giving effect to such transaction; (c) Liens securing Indebtedness permitted to be incurred pursuant to such clause (13) relate only to Obligations relating to Refinancing Indebtedness that (x) is secured by Liens on the same assets as the assets that secured the Indebtedness being refinanced or (y) extends, replaces, refunds, refinances, renews or defeases Indebtedness incurred or Disqualified Stock or Preferred Stock issued under clauses (3) (solely to the extent such Indebtedness was secured by a Lien prior to such refinancing) or (4) (solely to the extent such Indebtedness was secured by a Lien prior to such refinancing) of the second paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" (d) Liens securing Indebtedness permitted to be incurred pursuant to such clause (18) are solely on acquired property or Investment or extend only to the assets of the acquired entity, as the case may be, and the proceeds and products thereof; (e) Liens securing Indebtedness permitted to be incurred pursuant to such clause (27) extend only to the assets of Restricted Subsidiaries that are incurring such Indebtedness and (f) Liens securing Indebtedness permitted to be incurred pursuant to such clause (30) extend only to the assets subject to the Sale and Leaseback Transaction related thereto, accessions to such assets and the proceeds and products thereof, and any lease of such assets (including accessions thereto) and the proceeds and the products thereof;

(13) leases (including leases of aircrafts), licenses, subleases or sublicenses granted to others that do not (a) interfere in any material respect with the business of the Issuer and its Restricted Subsidiaries, taken as a whole or (b) secure any Indebtedness;

(14) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods;

(15) Liens (a) of a collection bank arising under Section 4-210 of the Uniform Commercial Code or any comparable or successor provision on items in the course of collection, (b) attaching to pooling, commodity trading accounts or other commodity brokerage accounts incurred in the ordinary course of business or consistent with past practice and (c) in favor of a banking or other financial institution or electronic payment service providers arising as a matter of law or under general terms and conditions encumbering deposits (including the right of setoff) and that are within the general parameters customary in the banking or finance industry;

(16) Liens (a) on cash advances or escrow deposits in favor of the seller of any property to be acquired in an Investment permitted under the Indenture to be applied against the purchase price for such Investment or otherwise in connection with any escrow arrangements with respect to any such Investment (including any letter of intent or purchase agreement with respect to such investment), and (b) consisting of an agreement to sell, transfer, lease or otherwise dispose of any property in a transaction permitted under "—Repurchase at the Option of Holders—Asset Sales," in each case, solely to the extent such Investment or sale, disposition, transfer or lease, as the case may be, would have been permitted on the date of the creation of such Lien;

(17) Liens existing on property at the time of its acquisition (by a merger, consolidation or amalgamation or otherwise) or existing on the property or shares of stock or other assets of any Person at the time such Person becomes a Restricted Subsidiary (including designating an Unrestricted Subsidiary as a Restricted Subsidiary), in each case after the Issue Date (other than Liens on the Equity Interests of any Person that becomes a Restricted Subsidiary); *provided* that (a) such Lien was not created in contemplation of such acquisition (by a merger, consolidation or amalgamation or otherwise) or such Person becoming a Restricted Subsidiary (including designating an Unrestricted Subsidiary as a Restricted Subsidiary), (b) such Lien does not extend to or cover any other assets or property of such Person or any Restricted Subsidiary (other than accessions to such assets or property, the proceeds or products thereof, any lease of such assets (including accessions thereto), the proceeds and the products thereof and customary security deposits in respect thereof and other than after-acquired property subject to a Lien securing Indebtedness and other obligations incurred prior to such time and which Indebtedness and other obligations are permitted under the Indenture that require or include, pursuant to their terms at such time, a pledge of after-acquired property, it being understood that such requirement shall not be permitted to apply to any property to which such requirement would not have applied but for such acquisition; *provided*, *however*, that individual financings of equipment provided by one lender may be cross collateralized to other financings of equipment provided by such lender) and (c) the Indebtedness secured thereby is permitted to be incurred at such time under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;"

(18) any interest or title of a lessor under leases (including leases constituting Non-Financing Lease Obligations but excluding leases constituting Financing Lease Obligations) entered into by the Issuer or any of its Restricted Subsidiaries in the ordinary course of business or consistent with past practice;

(19) Liens arising out of conditional sale, title retention, consignment or similar arrangements for sale or purchase of goods by the Issuer or any of its Restricted Subsidiaries in the ordinary course of business or consistent with past practice;

(20) Liens deemed to exist in connection with Investments in repurchase agreements permitted under clause (4) of the definition of "Cash Equivalents;"

(21) Liens encumbering reasonable customary initial deposits and margin deposits and similar Liens attaching to commodity trading accounts or other brokerage accounts incurred in the ordinary course of business and not for speculative purposes;

(22) Liens that are contractual rights of setoff or rights of pledge (a) relating to the establishment of depository relations with banks not given in connection with the incurrence of Indebtedness, (b) relating to pooled deposit or sweep accounts to permit satisfaction of overdraft or similar obligations incurred in the ordinary course of business of the Issuer and its Restricted Subsidiaries or

consistent with past practice or (c) relating to purchase orders and other agreements entered into with customers of the Issuer or any of its Restricted Subsidiaries in the ordinary course of business or consistent with past practice;

(23) ground leases, subleases, licenses or sublicenses in respect of real property on which facilities owned or leased by the Issuer or any of its Restricted Subsidiaries are located;

(24) (a) Liens on insurance policies and the proceeds thereof securing the financing of the premiums with respect thereto or (b) deposits made or other security provided to secure liabilities to insurance carriers under insurance or self-insurance arrangements in the ordinary course of business or consistent with past practice;

(25) Liens on cash, Cash Equivalents and Permitted Investments used to satisfy or discharge Indebtedness;

(26) Liens on receivables and related assets incurred in connection with Permitted Receivables Financings;

(27) receipt of progress payments and advances from customers in the ordinary course of business or consistent with past practice to the extent the same creates a Lien on the related inventory and proceeds thereof;

(28) Liens securing Hedging Obligations;

(29) Liens securing Obligations relating to any Indebtedness or other obligations of a Restricted Subsidiary owing to the Issuer or another Restricted Subsidiary permitted to be incurred in accordance with the covenant described under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;"

(30) Liens in favor of the Issuer or any Guarantor or the Trustee;

(31) Liens on vehicles or equipment of the Issuer or any of its Restricted Subsidiaries granted in the ordinary course of business or consistent with past practice;

(32) Liens to secure any modification, refinancing, refunding, restatement, exchange, extension, renewal or replacement (or successive refinancing, refunding, restatement, exchange, extensions, renewals or replacements) as a whole, or in part, of any Indebtedness secured by any Lien referred to in clauses (6), (11), (12), (16), (17), (32), (33), (34) and (38) of this definition; *provided* that (a) such new Lien shall be limited to all or part of the same property that secured the original Lien (plus accessions, additions and improvements on such property, including after-acquired property that is (i) affixed or incorporated into the property covered by such Lien, (ii) after-acquired property subject to a Lien securing such Indebtedness, the terms of which Indebtedness require or include a pledge of after-acquired property (it being understood that such requirement shall not be permitted to apply to any property to which such requirement would not have applied but for such acquisition) and (iii) the proceeds and products thereof), (b) the Indebtedness secured by such Lien at such time is not increased to any amount greater than the sum of (x) the outstanding principal amount or, if greater, committed amount of the Indebtedness described under clauses (6), (11), (12), (16), (17), (32), (33), (34) and (38) of this definition at the time the original Lien became a Permitted Lien under the Indenture, and (y) an amount necessary to pay accrued but unpaid interest on such Indebtedness and any dividend, premium (including tender premiums), defeasance costs, underwriting discounts and any fees, costs and expenses (including upfront fees, original issue discount or similar fees) incurred in connection with such modification, refinancing, refunding, extension, renewal or replacement and (c) in the case of any modification, refinancing, refunding, restatement, exchange, extension, renewal or replacement of any Lien with a Junior Lien Priority, such new Lien shall have a Junior Lien Priority;

(33) other Liens securing outstanding Indebtedness in an aggregate principal amount not to exceed, together with any Liens securing any modification, refinancing, refunding, restatement, exchange, extension, renewal or replacement (or successive modification, refinancing, refunding, restatement, exchange, extensions, renewals or replacements) under clause (32) above, the greater of (x) $550.0 million and (y) 50.0% of Consolidated EBITDA of the Issuer for the Applicable Measurement Period at the time of occurrence; *provided* that if such Liens are on the Collateral, the holders of such Indebtedness or their representative shall have become party to an Intercreditor Agreement (or any Intercreditor Agreement shall have been amended or replaced in a manner reasonably acceptable to the Issuer or the Controlling Collateral Agent, which results in such holders or their representative having rights to share in the Collateral on a pari passu basis or a junior lien basis);

(34) Liens incurred to secure Additional First Lien Obligations in respect of any Indebtedness permitted to be incurred pursuant to the covenant described above under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" *provided* that, with respect to Liens securing Additional First Lien Obligations permitted under this clause (34), at the time of incurrence of such Obligations and after giving pro forma effect thereto, the Consolidated First Lien Debt Ratio of the Issuer for the Applicable Measurement Period would be no greater than 5.00 to 1.00;

(35) (a) any encumbrance or restriction (including put and call arrangements) with respect to Capital Stock of any joint venture or similar arrangement pursuant to any joint venture or similar agreement, (b) Liens on Equity Interests in joint ventures; *provided* that any such Lien is in favor of a creditor of such joint venture and such creditor is not an Affiliate of any partner to such joint venture and (c) purchase options, call, and similar rights of, and restrictions for the benefit of, a third party with respect to Equity Interests held by the Issuer or any of its Subsidiaries in joint ventures;

(36) Liens on Capital Stock of an Unrestricted Subsidiary that secure Indebtedness or other obligations of such Unrestricted Subsidiary;

(37) agreements to subordinate any interest of the Issuer or any Restricted Subsidiary in any accounts receivable or other proceeds arising from inventory consigned by the Issuer or any Restricted Subsidiary pursuant to an agreement entered into in the ordinary course of business or consistent with past practice;

(38) Liens on property or assets used to defease or to irrevocably satisfy and discharge Indebtedness;

(39) Liens securing the Notes (other than any Additional Notes) and the related Guarantees;

(40) Liens created in connection with a project financed with, and created to secure, Non-Recourse Indebtedness;

(41) Liens relating to future escrow arrangements securing Indebtedness, including (i) Liens on escrowed proceeds from the issuance of Indebtedness for the benefit of the related holders of debt securities or other Indebtedness (or the underwriters, arrangers, trustee or collateral agent thereof) and (ii) Liens on cash or Cash Equivalents set aside at the time of the incurrence of any Indebtedness, in either case to the extent such cash or Cash Equivalents prefund the payment of interest or premium or discount on such Indebtedness (or any costs related to the issuance of such Indebtedness) and are held in an escrow account or similar arrangement to be applied for such purpose;

(42) security given to a public utility or any municipality or governmental authority when required by such utility or authority in connection with the operations of the Issuer or any of its Restricted Subsidiaries in the ordinary course of business or consistent with past practice;

(43) Liens securing Cash Management Obligations owed by the Issuer or any of its Restricted Subsidiaries to any lender under the Senior Credit Facilities or any Affiliate of such a lender; and

(44) Liens solely on any cash earnest money deposits made by the Issuer or any of its Restricted Subsidiaries in connection with any letter of intent or purchase agreement.

For purposes of determining compliance with this definition, (A) a Lien need not be incurred solely by reference to one category of Permitted Liens described in this definition but are permitted to be incurred in part under any combination thereof and of any other available exemption, (B) in the event that a Lien (or any portion thereof) meets the criteria of one or more of the categories of Permitted Liens, Issuer shall, in its sole discretion, classify or reclassify such Lien (or any portion thereof) in any manner that complies with this definition and (C) in the event that a portion of Indebtedness secured by a Lien could be classified as secured in part pursuant to clause (34) above (giving pro forma effect only to the incurrence of such portion of such Indebtedness), the Issuer, in its sole discretion, may classify such portion of such Indebtedness (and any Obligations in respect thereof) as having been secured pursuant to clause (34) above and thereafter the remainder of the Indebtedness as having been secured pursuant to one or more of the other clauses of this definition.

For purposes of this definition, the term "Indebtedness" shall be deemed to include interest on such Indebtedness.

"*Permitted Parent*" means (a) any Parent Entity that at the time it became a Parent Entity of the Issuer was a Permitted Holder pursuant to clause (1) of the definition thereof and was not formed in connection with, or in contemplation of, a transaction that would otherwise constitute a Change of Control and (b) any Public Company (or Wholly-Owned Subsidiary of such Public Company), except to the extent (and until such time as) any Person or group (other than a Permitted Holder) is deemed to be or becomes a beneficial owner of Voting Stock of such Public Company representing more than 50% of the total voting power of the Voting Stock of such Public Company (as determined in accordance with the provisions of the final paragraph of the definition of "Change of Control").

"*Permitted Plan*" means any employee benefits plan of the Issuer or any of its Affiliates and any Person acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan.

"*Permitted Receivables Financing*" means, collectively, (A) the A/R Facility and (B)(i) with respect to receivables of the type constituting any term securitizations, receivables securitizations or other receivables financings (including any factoring program), in each case that are non-recourse to the Issuer and the Restricted Subsidiaries (except for any customary limited recourse that is applicable only to Subsidiaries that are not the Issuer or a Subsidiary Guarantor, that is customary in the relevant local market and reasonable extensions thereof) and (ii) with respect to receivables (including, without limitation, trade and lease receivables) not otherwise constituting term securitizations, other receivables securitizations or other similar financings (including any factoring program), in each case in an amount not to exceed 85% of the book value of all accounts receivable of the Issuer and its Restricted Subsidiaries as of any date and that are non-recourse to the Issuer and its Restricted Subsidiaries (except for any customary limited recourse that is applicable only to Subsidiaries that are not the Issuer or a Subsidiary Guarantor, that is customary in the relevant local market; *provided* that with respect to Permitted Receivables Financings incurred in the form of a factoring program under this clause (ii), the outstanding amount of such Permitted Receivables Financing for the purposes of this definition shall be deemed to be equal to the Permitted Receivables Net Investment for the last Applicable Measurement Period).

"*Permitted Receivables Net Investment*" means the aggregate cash amount paid by the purchasers under any Permitted Receivables Financing in the form of a factoring program in connection with their purchase of accounts receivable and customary related assets or interests therein, as the same may be reduced from time to time by collections with respect to such accounts receivable and related assets or otherwise in accordance with the terms of such Permitted Receivables Financing (but excluding any such collections used to make payments of commissions, discounts, yield and other fees and charges incurred in connection with any Permitted Receivables Financing in the form of a factoring program which are payable to any Person other than the Issuer or any of its Restricted Subsidiaries).

"*Person*" means any individual, corporation, limited liability company, partnership (including limited liability partnership), joint venture, association, joint stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any other entity.

"*Phillipsburg Real Property*" means any Real Property situated in Phillipsburg, New Jersey and owned by the Issuer or any Restricted Subsidiary as of the Issue Date.

"*Preferred Stock*" means any Equity Interest with preferential rights of payment of dividends or upon liquidation, dissolution, or winding up.

"*Proceeds*" has the meaning set forth in the Security Agreement.

"*Public Company*" means any Person with a class or series of Voting Stock that is traded on the New York Stock Exchange, the NASDAQ or the London Stock Exchange.

"*Purchase Money Obligations*" means any Indebtedness incurred to finance or refinance the acquisition, leasing, construction or improvement of property (real or personal) or assets (other than Capital Stock), and whether acquired through the direct acquisition of such property or assets, or otherwise (including through the purchase of Capital Stock of any Person owning such property or assets).

"*Qualified Proceeds*" means assets that are used or useful in, or Capital Stock of any Person engaged in, a Similar Business.

"*Qualified Securitization Facilities*" has the meaning set forth in the Senior Credit Facilities.

"*Rating Agencies*" means (1) S&P, Moody's and Fitch or (2) if S&P, Moody's or Fitch or each of them shall not make a corporate rating with respect to the Issuer or a rating on the Notes publicly available, a nationally recognized statistical rating agency or agencies, as the case may be, selected by the Issuer, which shall be substituted for any or all of S&P, Moody's or Fitch, as the case may be, with respect to such corporate rating or the rating of the Notes, as the case may be.

"*Receivables Fees*" means distributions or payments made directly or by means of discounts with respect to any accounts receivable or participation interest therein issued or sold in connection with, and other fees paid to a Person that is not a Restricted Subsidiary in connection with, any Permitted Receivables Financing.

"*Receivables Subsidiary*" means any Special Purpose Entity established in connection with a Permitted Receivables Financing.

"*Redemption Date*" has the meaning set forth under "Optional Redemption."

"*Regulated Bank*" means an Approved Commercial Bank that is (i) a U.S. depository institution the deposits of which are insured by the Federal Deposit Insurance Corporation; (ii) a corporation organized under section 25A of the U.S. Federal Reserve Act of 1913; (iii) a branch, agency or commercial lending company of a foreign bank operating pursuant to approval by and under the supervision of the Board of Governors under 12 CFR part 211; (iv) a non-U.S. branch of a foreign bank managed and controlled by a U.S. branch referred to in clause (iii); or (v) any other U.S. or non-U.S. depository institution or any branch, agency or similar office thereof supervised by a bank regulatory authority in any jurisdiction.

"*Related Business Assets*" means assets (other than cash or Cash Equivalents) used or useful in a Similar Business; *provided* that any assets received by the Issuer or a Restricted Subsidiary in exchange for assets transferred by the Issuer or a Restricted Subsidiary shall not be deemed to be Related Business Assets if they consist of securities of a Person, unless upon receipt of the securities of such Person, such Person would become a Restricted Subsidiary.

"*Restricted Investment*" means an Investment other than a Permitted Investment.

"*Restricted Subsidiary*" means, at any time, with respect to any Person, any direct or indirect Subsidiary of such Person (including any Foreign Subsidiary) that is not then an Unrestricted Subsidiary; *provided*, *however*, that upon the occurrence of an Unrestricted Subsidiary ceasing to be an Unrestricted Subsidiary, such Subsidiary shall be

included in the definition of "Restricted Subsidiary." Unless the context otherwise requires, any references to Restricted Subsidiary refer to a Restricted Subsidiary of the Issuer.

"*S&P*" means S&P Global Ratings Inc., and any successor to its rating agency business.

"*Sale and Lease-Back Transaction*" means any arrangement with any Person providing for the leasing by the Issuer or any of its Restricted Subsidiaries of any real property or tangible personal property, which property has been or is to be sold or transferred by the Issuer or such Restricted Subsidiary to such Person in contemplation of such leasing.

"*Screened Affiliate*" means any Affiliate of a Holder (i) that makes investment decisions independently from such Holder and any other Affiliate of such Holder that is not a Screened Affiliate, (ii) that has in place customary information screens between it and such Holder and any other Affiliate of such Holder that is not a Screened Affiliate and such screens prohibit the sharing of information with respect to the Issuer or its Subsidiaries, (iii) whose investment policies are not directed by such Holder or any other Affiliate of such Holder that is acting in concert with such Holder in connection with its investment in the Notes and (iv) whose investment decisions are not influenced by the investment decisions of such Holder or any other Affiliate of such Holder that is acting in concert with such Holders in connection with its investment in the Notes.

"*SEC*" means the U.S. Securities and Exchange Commission.

"*Second Lien Collateral Agent*" means the Second Lien Representative for the holders of any initial Second Lien Obligations.

"*Second Lien Documents*" means the credit and security documents governing the Second Lien Obligations, including, without limitation, the related Second Lien Security Documents and Second Lien Intercreditor Agreement.

"*Second Lien Intercreditor Agreement*" has the meaning set forth under "Security for the Notes—Second Lien Intercreditor Agreement."

"*Second Lien Obligations*" means the Obligations with respect to Indebtedness permitted to be incurred under the Indenture, which is by its terms intended to be secured by the Collateral with a Junior Lien Priority relative to the Notes; *provided* such Lien is permitted to be incurred under the Indenture; *provided*, *further*, that the holders of such Indebtedness or their Second Lien Representative shall become party to the Second Lien Intercreditor Agreement and any other applicable Intercreditor Agreements.

"*Second Lien Representative*" means any duly authorized representative of any holders of Second Lien Obligations, which representative is named as such in the Second Lien Intercreditor Agreement or any joinder thereto.

"*Second Lien Secured Parties*" means the holders from time to time of any Second Lien Obligations, the Second Lien Collateral Agent and each other Second Lien Representative.

"*Second Lien Security Agreement*" means any security agreement covering a portion of the Collateral to be entered into by the Issuer, the Guarantors and a Second Lien Representative.

"*Second Lien Security Documents*" means, collectively, the Second Lien Intercreditor Agreement, the Second Lien Security Agreement, other security agreements relating to the Collateral and the mortgages and instruments filed and recorded in appropriate jurisdictions to preserve and protect the Liens on the Collateral (including, without limitation, financing statements under the Uniform Commercial Code of the relevant states) applicable to the Collateral, as amended, amended and restated, modified, renewed or replaced from time to time.

"*Secured Indebtedness*" means any Indebtedness of the Issuer or any of its Restricted Subsidiaries secured by a Lien.

"*Securitization Subsidiary*" means any Subsidiary formed for the purpose of, and that solely engages only in one or more Qualified Securitization Facilities and other activities reasonably related thereto.

"*Senior Credit Facility Obligations*" means "Secured Obligations" as defined in the Senior Credit Facilities.

"*Senior Credit Facility Parties*" means "Secured Parties" as defined in the Senior Credit Facilities.

"*Securities Act*" means the Securities Act of 1933, as amended, and the rules and regulations of the SEC promulgated thereunder.

"*Security Agreement*" means that certain Security Agreement, dated as of the Issue Date, among the Issuer, the Guarantors and the Notes Collateral Agent.

"*Security Documents*" means, collectively, the First Lien Intercreditor Agreement, the Security Agreement, the Mortgages, other security agreements relating to the Collateral and the mortgages and instruments filed and recorded in appropriate jurisdictions to preserve and protect the Liens on the Collateral (including, without limitation, financing statements under the Uniform Commercial Code of the relevant states) applicable to the Collateral, each for the benefit of the Notes Collateral Agent, as amended, amended and restated, modified, renewed or replaced from time to time.

"*Senior Credit Facilities*" means the revolving credit facility and term loan facilities under the Credit Agreement, dated as of November 21, 2017, as amended, including, in each case, any related notes, mortgages, letters of credit, guarantees, collateral documents, instruments and agreements executed in connection therewith, and any appendices, exhibits, annexes or schedules to any of the foregoing (as the same may be in effect from time to time) and any amendments, supplements, modifications, extensions, renewals, restatements, refundings, replacements, exchanges or refinancings thereof (whether with the original agents and lenders or other agents or lenders or otherwise, and whether provided under the original credit agreement or other credit agreements or otherwise) and any indentures or credit facilities or commercial paper facilities with banks or other institutional lenders or investors that extend, replace, refund, replace, exchange, refinance, renew or defease any part of the loans, notes, other credit facilities or commitments thereunder, including any such replacement, refunding, exchange or refinancing facility or indenture that increases the amount permitted to be borrowed or issued thereunder or alters the maturity thereof (*provided* that such increase in borrowings is permitted under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock" above) or adds Subsidiaries as additional borrowers or guarantors thereunder and whether by the same or any other agent, trustee, lender or group of lenders, investors, holders or otherwise.

"*Senior Indebtedness*" means:

(1) all Indebtedness of the Issuer or any Subsidiary Guarantor outstanding under the Senior Credit Facilities, the Existing Unsecured Notes or Notes and related Guarantees (including interest, fees or expenses accruing on or after the filing of any petition in bankruptcy or similar proceeding or for reorganization of the Issuer or any Guarantor (at the rate provided for in the documentation with respect thereto, regardless of whether or not a claim for post-filing interest, fees or expenses is allowed in such proceedings)), and any and all other fees, expense reimbursement obligations, indemnification amounts, penalties, and other amounts (whether existing on the Issue Date or thereafter created or incurred) and all obligations of the Issuer or any Guarantor to reimburse any bank or other Person in respect of amounts paid under letters of credit, acceptances or other similar instruments;

(2) all (a) Hedging Obligations (and guarantees thereof) and (b) Cash Management Obligations (and guarantees thereof); *provided* that such Hedging Obligations and Cash Management Obligations, as the case may be, are permitted to be incurred under the terms of the Indenture;

(3) any other Indebtedness of the Issuer or any Guarantor permitted to be incurred under the terms of the Indenture, unless the instrument under which such Indebtedness is incurred expressly provides that it is subordinated in right of payment to the Notes or any related Guarantee; and

(4) all Obligations with respect to the items listed in the preceding clauses (1), (2) and (3);

provided, *however*, that Senior Indebtedness shall not include:

(a) any obligation of such Person to the Issuer or any of its Subsidiaries;

(b) any liability for federal, state, local or other taxes owed or owing by such Person;

(c) any accounts payable or other liability to trade creditors arising in the ordinary course of business;

(d) any Indebtedness or other Obligation of such Person which is subordinate or junior in right of payment to any other Indebtedness or other Obligation of such Person; or

(e) that portion of any Indebtedness which at the time of incurrence is incurred in violation of the Indenture.

"*Short Derivative Instrument*" means a Derivative Instrument (i) the value of which generally decreases, and/or the payment or delivery obligations under which generally increase, with positive changes to the Performance References and/or (ii) the value of which generally increases, and/or the payment or delivery obligations under which generally decrease, with negative changes to the Performance References.

"*Series*" means (a) with respect to the First Lien Secured Parties, each of (i) the Senior Credit Facility Secured Parties (in their capacities as such), (ii) the Notes Secured Parties (in their capacity as such) and (iii) the Additional First Lien Secured Parties that become subject to the First Lien Intercreditor Agreement after the Issue Date that are represented by a common representative (in its capacity as such for such Additional First Lien Secured Parties) and (b) with respect to any First Lien Obligations, each of (i) the Senior Credit Facility Obligations, (ii) the First Lien Notes Obligations and (iii) the Additional First Lien Obligations incurred pursuant to any applicable agreement, which, pursuant to any joinder agreement, are to be represented under the First Lien Intercreditor Agreement by a common representative (in its capacity as such for such Additional First Lien Obligations).

"*Shared Collateral*" means, at any time, Collateral in which the holders of two or more Series of First Lien Obligations hold a valid and perfected security interest at such time. If more than two Series of First Lien Obligations are outstanding at any time and the holders of less than all Series of First Lien Obligations hold a valid and perfected security interest in any Collateral at such time, then such Collateral shall constitute Shared Collateral for those Series of First Lien Obligations that hold a valid security interest in such Collateral at such time and shall not constitute Shared Collateral for any Series which does not have a valid and perfected security interest in such Collateral at such time.

"*Significant Subsidiary*" means any Restricted Subsidiary that would be a "significant subsidiary" of the Issuer within the meaning of Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act, as such regulation is in effect on the Issue Date.

"*Similar Business*" means any business conducted or proposed to be conducted by the Issuer and its Restricted Subsidiaries on the Issue Date or any business that is similar, complementary, reasonably related, synergistic, incidental or ancillary thereto, or is a reasonable extension, development or expansion thereof.

"*Special Purpose Entity*" means a direct or indirect Subsidiary of the Issuer, whose organizational documents contain restrictions on its purpose and activities and impose requirements intended to preserve its separateness from the Issuer and/or one or more Subsidiaries of the Issuer.

"*Specified Event*" has the meaning given to such term in the definition of "Consolidated EBITDA."

"*Specified Transactions*" has the meaning set forth under "Limited Condition Acquisition and Specified Transactions."

"*Subordinated Indebtedness*" means, with respect to the Notes and the Guarantees,

(1) any Indebtedness of the Issuer which is by its terms subordinated in right of payment to the Notes, and

(2) any Indebtedness of any Guarantor which is by its terms subordinated in right of payment to the Guarantee of such entity of the Notes.

"*Subsidiary*" means, with respect to any Person:

(1) any corporation, association or other business entity (other than a partnership, joint venture, limited liability company or similar entity) of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time of determination owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof; and

(2) any partnership, joint venture, limited liability company or similar entity of which

(x) more than 50% of the capital accounts, distribution rights, total equity and voting interests or general or limited partnership interests, as applicable, are owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof whether in the form of membership, general, special or limited partnership or otherwise, and

(y) such Person or any Restricted Subsidiary of such Person is a controlling general partner or otherwise controls such entity.

For the avoidance of doubt, any entity that is owned at a 50% or less level (as described above) shall not be a "Subsidiary" for any purpose under the Indenture, regardless of whether such entity is consolidated on the Issuer's or any of its Restricted Subsidiaries' financial statements.

"*Subsidiary Guarantor*" means each Restricted Subsidiary of Holdings that executes the Indenture as a Guarantor on the Issue Date and each other Restricted Subsidiary of Holdings that thereafter guarantees the Notes in accordance with the terms of the Indenture, until, in each case, such Person is released from the guarantee of the Notes in accordance with the terms of the Indenture.

"*Taxes*" shall mean all present and future taxes, levies, imposts, deductions, charges, duties and withholdings and any charges of a similar nature (including interest and penalties with respect thereto) that are imposed by any government or other taxing authority.

"*Testing Party*" has the meaning set forth under "Limited Condition Acquisition and Specified Transactions."

"*Total Assets*" means, as of any Applicable Calculation Date, with respect to any Person and its Restricted Subsidiaries, the total assets of such Person and its Restricted Subsidiaries on a consolidated basis, as shown on the most recent consolidated balance sheet of such Person and its Restricted Subsidiaries as of the end of the most recent fiscal quarter for which internal financial statements are available immediately preceding the Applicable Calculation Date; *provided* that, for purposes of testing the covenants under the Indenture in connection with any transaction, the Total Assets of such Person and its Restricted Subsidiaries shall be adjusted to reflect such pro forma adjustments as

are appropriate and consistent with the pro forma adjustment provisions set forth in the definition of Fixed Charge Coverage Ratio (other than as set forth in the first proviso to the first paragraph of such definition).

"*Transaction Expenses*" means any fees or expenses incurred or paid by the Issuer, its Restricted Subsidiaries, any Parent Entity and any Investors in connection with the VWR Transaction (including, without limitation, payment to former, current and future officers, employees, managers, members, partners and directors as change of control payments, severance payments, consent payments, special or retention bonuses and charges for repurchase or rollover, acceleration or payments of, or modifications to, stock options, expenses in connection with hedging transactions related to the Senior Credit Facilities, the A/R Facility and any original issue discount or upfront fees), the Indenture, the Notes, the Senior Credit Facilities, the Existing Senior Notes and the transactions contemplated hereby and thereby.

"*Transactions*" has the meaning set forth in the Offering Circular.

"*Transaction Test Date*" has the meaning set forth under "Limited Condition Acquisition and Specified Transactions."

"*Uniform Commercial Code*" or "*UCC*" means (i) the Uniform Commercial Code as the same may from time to time be in effect in the State of New York or (ii) the Uniform Commercial Code (or similar code or statute) of another jurisdiction, to the extent it applies to any item or items of Collateral. References in the Indenture and the other Security Documents to specific sections of the Uniform Commercial Code are based on the Uniform Commercial Code as in effect in the State of New York on the Issue Date. In the event such Uniform Commercial Code is amended or another Uniform Commercial Code described in clause (ii) is applicable, such section reference shall be deemed to be references to the comparable section in such amended or other Uniform Commercial Code.

"*Unrestricted Subsidiary*" means:

(1) any Subsidiary of the Issuer that at the time of determination is an Unrestricted Subsidiary (as designated by the Issuer, as provided below); and

(2) any Subsidiary of an Unrestricted Subsidiary.

The Issuer may designate any Subsidiary of the Issuer (including any existing Subsidiary and any newly acquired or newly formed Subsidiary) to be an Unrestricted Subsidiary after the Issue Date unless such Subsidiary or any of its Subsidiaries owns any Equity Interests or Indebtedness of, or owns or holds any Lien on, any property of, the Issuer or any Restricted Subsidiary of the Issuer (other than solely any Subsidiary of the Subsidiary to be so designated); *provided* that

(1) any Unrestricted Subsidiary must be an entity of which the Equity Interests entitled to cast at least a majority of the votes that may be cast by all Equity Interests having ordinary voting power for the election of directors or Persons performing a similar function are owned, directly or indirectly, by the Issuer;

(2) such designation complies with the covenant described under "Certain Covenants—Limitation on Restricted Payments;" and

(3) each of:

(a) the Subsidiary to be so designated and (b) its Subsidiaries has not at the time of designation, and does not thereafter, create, incur, issue, assume, guarantee or otherwise become directly or indirectly liable with respect to any Indebtedness pursuant to which the lender has recourse to any of the assets of the Issuer or any Restricted Subsidiary (other than Equity Interests in the Unrestricted Subsidiary).

The Issuer may designate any Unrestricted Subsidiary to be a Restricted Subsidiary; *provided* that, immediately after giving effect to such designation, no Default shall have occurred and be continuing and either:

(1) the Issuer could incur at least $1.00 of additional Indebtedness pursuant to either (x) the Fixed Charge Coverage Ratio test or (y) the Consolidated Total Debt Ratio test, in each case, described in the first paragraph under "Certain Covenants—Limitation on Incurrence of Indebtedness and Issuance of Disqualified Stock and Preferred Stock;" or

(2) either (x) the Fixed Charge Coverage Ratio for the Issuer and its Restricted Subsidiaries would be equal to or greater than such ratio for the Issuer and its Restricted Subsidiaries or (y) the Consolidated Total Debt Ratio test would be equal to or less than such ratio for the Issuer and its Restricted Subsidiaries, in each case, immediately prior to such designation and on a pro forma basis taking into account such designation.

Any such designation by the Issuer shall be notified by the Issuer to the Trustee by promptly filing with the Trustee an Officer's Certificate certifying that such designation complied with the foregoing provisions.

"*Unsecured Financing Lease Obligations*" means, collectively, Financing Lease Obligations not secured by a Lien and Non-Financing Lease Obligations.

"*Unsecured Financing Leases*" means all leases underlying Unsecured Financing Lease Obligations.

"*Voting Stock*" of any Person as of any date means the Capital Stock of such Person that is at the time entitled to vote in the election of the Board of such Person.

"*VWR*" means VWR Corporation, a Delaware corporation.

"*VWR Transaction*" means the transactions effected pursuant to the VWR Transaction Agreement and the other transactions in connection therewith, including, for the avoidance of doubt, (i) all financing and reorganization activities and (ii) payments to, and transactions with, equityholders in the Issuer or any of its Subsidiaries or Parent Entities, in each case of clauses (i) and (ii), in connection with the transactions effected pursuant to the VWR Transaction Agreement.

"*VWR Transaction Agreement*" means the Agreement and Plan of Merger among the Issuer, Vail Acquisition Corp and VWR, dated as of May 4, 2017, as amended.

"*Weighted Average Life to Maturity*" means, when applied to any Indebtedness, Disqualified Stock or Preferred Stock, as the case may be, at any date, the quotient obtained by dividing:

(1) the sum of the products of the number of years (calculated to the nearest one-twelfth) from the date of determination to the date of each successive scheduled principal payment of such Indebtedness or redemption or similar payment with respect to such Disqualified Stock or Preferred Stock multiplied by the amount of such payment; by

(2) the sum of all such payments.

"*Wholly-Owned Subsidiary*" of any Person means a Subsidiary of such Person, 100% of the outstanding Equity Interests of which (other than directors' qualifying shares and shares issued to foreign nationals as required by applicable law) shall at the time be owned by such Person or by one or more Wholly-Owned Subsidiaries of such Person.

"*Wholly-Owned Restricted Subsidiary*" of any Person means a Wholly-Owned Subsidiary of such Person that is a Restricted Subsidiary.

BOOK ENTRY; DELIVERY AND FORM

The notes offered and sold to qualified institutional buyers in reliance on Rule 144A ("Rule 144A Notes") will be represented by one or more global notes in registered form without interest coupons attached (collectively, the "144A Global Notes"). The 144A Global Notes will be deposited with, or on behalf of, a common depositary (the "Common Depositary") for the accounts of Euroclear and Clearstream and registered in the name of the nominee of the Common Depositary.

The notes sold in offshore transactions in reliance on Regulation S under the Securities Act ("Regulation S Notes) will be represented by one or more global notes in registered form without interest coupons attached (collectively, the "Regulation S Global Notes" and, together with the Rule 144A Global Notes, the "Global Notes"). The Regulation S Global Notes will be deposited with, or on behalf of, the Common Depositary for the accounts of Euroclear and Clearstream and registered in the name of the nominee of the Common Depositary.

General

The Global Notes will be deposited, on the issue date, with the Common Depositary (as defined under the caption "Description of Notes") and registered in the name of the Common Depositary or a nominee of the Common Depositary for the account of Euroclear and Clearstream (each as defined under the caption "Description of Notes"). Except as set forth below, the Global Notes may be transferred, in whole and not in part, only to a Common Depositary for Clearstream and Euroclear or its nominee. No link is expected to be established among Clearstream or Euroclear in connection with the issuance of the notes.

Ownership of interests in the Rule 144A Global Note (the "Rule 144A Book Entry Interests") and ownership of interests in the Regulation S Global Note (the "Regulation S Book Entry Interests" and together with the Rule 144A Book Entry Interests, the "Book Entry Interests"), will be limited to persons that have accounts with Euroclear and/or Clearstream or persons that hold interests through such participants. Euroclear and Clearstream will hold interests in the Global Notes on behalf of their participants through customers' securities accounts in their respective names on the books of their respective depositories. Except under the limited circumstances described below, Book Entry Interests will not be issued in definitive form.

Book Entry Interests will be shown on, and transfers thereof will be effected only through, records maintained by Euroclear and Clearstream and their participants. The laws of some jurisdictions, including certain States of the United States, may require that certain purchasers of securities take physical delivery of those securities in definitive form. The foregoing limitations may impair your ability to own, transfer or pledge Book Entry Interests. In addition, while the notes are in global form, holders of Book Entry Interests will not be considered holders of notes for any purpose.

So long as the notes are held in global form, Euroclear and/or Clearstream (or their respective nominees), as applicable, will be considered the sole holders of the Global Notes for all purposes under the indenture governing the notes (as defined under the caption "Description of Notes"). In addition, participants must rely on the procedures of Euroclear and Clearstream, and indirect participants must rely on the procedures of Euroclear and Clearstream and the participants through which they own Book Entry Interests, to transfer their interests or to exercise any rights of holders of notes under the indenture governing the notes.

None of the Issuer, the Trustee or any paying agent will have any responsibility, or be liable, for any aspect of the records relating to the Book Entry Interests, nor the action or inaction of Euroclear, Clearstream or any common depositary.

The Issuer has obtained the information in this section, "Book-Entry, Delivery and Form," concerning Clearstream and Euroclear and the book-entry system and procedures from sourced that it believes to be reliable, but the Issuer takes no responsibility for the accuracy of this information.

Definitive Registered Notes

Under the terms of the indenture governing the notes, owners of the Book Entry Interests will receive notes in certificated form (the "Definitive Registered Notes"), (1) if Euroclear or Clearstream notifies the Issuer that it is unwilling or unable to continue to act as depositary for the notes and a successor depositary is not appointed by the Issuer within 120 days, (2) if the Issuer, at its option, notifies the Trustee and the applicable paying agent in writing that it elects to cause the issuance of Definitive Registered Notes or (3) if the owner of a Book Entry Interest requests such exchange in writing delivered through Euroclear or Clearstream following an Event of Default and commencement of enforcement action under the indenture governing the notes.

The Issuer understands that upon request by an owner of a Book Entry Interest described in the immediately preceding clause (3), Euroclear's and Clearstream's current procedure would be to request that the Issuer issue or cause to be issued notes in definitive registered form to all owners of Book Entry Interests.

In such an event, the Issuer will issue Definitive Registered Notes, registered in the name or names and issued in any approved denominations requested by or on behalf of Euroclear, Clearstream or the Common Depositary, as applicable (in accordance with their respective customary procedures and based upon directions received from participants reflecting the beneficial ownership of Book Entry Interests), and such Definitive Registered Notes will bear the restrictive legend as provided in the indenture governing the notes, unless that legend is not required by the indenture governing the notes or applicable law. Should Definitive Registered Notes be issued to individual holders of the notes, a holder of notes who, as a result of trading or otherwise, holds a principal amount of notes that is less than the minimum denomination of the notes would be required to purchase an additional principal amount of notes such that its holding of notes amounts to the minimum specified denomination.

To the extent permitted by law, the Issuer, the Trustee and the applicable paying agent each shall be entitled to treat the registered holder of any Global Note as the absolute owner thereof and no person will be liable for treating the registered holder as such. Ownership of the Global Notes will be evidenced through registration from time to time at the registered office of the registrar, and such registration is a means of evidencing title to the notes.

The Issuer will not impose any fees or other charges in respect of the notes; however, owners of the Book Entry Interests may incur fees normally payable in respect of the maintenance and operation of accounts in Euroclear and Clearstream.

Redemption of the Global Notes

In the event that any Global Note (or any portion thereof) is redeemed, Euroclear and/or Clearstream, as applicable, will redeem an equal amount of the Book Entry Interests in such Global Note from the amount received by them in respect of the redemption of such Global Note. The redemption price payable in connection with the redemption of such Book Entry Interests will be equal to the amount received by Euroclear and Clearstream, as applicable, in connection with the redemption of such Global Note (or any portion thereof).

The Issuer understands that, under the existing practices of Euroclear and Clearstream, if fewer than all of the notes are to be redeemed at any time, Euroclear and Clearstream will credit their participants' accounts on a proportionate basis (with adjustments to prevent fractions), by lot or on such other basis as they deem fair and appropriate; *provided*, *however*, that no Book Entry Interest of less than €100,000 principal amount may be redeemed in part.

Payments on Global Notes

The Issuer will make payments of any amounts owing in respect of the Global Notes (including principal, premium, if any, interest and any Additional Amounts) to the applicable paying agent, and such paying agent will, in turn, make such payments to the Common Depositary or its nominee for Euroclear and Clearstream. The Common Depositary will distribute such payments to participants in accordance with their customary procedures. All payments of principal and interest on the notes by or on behalf of the Issuer will be made free and clear of and without withholding or deduction for or on account of any present or future tax, assessment or other governmental charge (and any interest, penalties and additions with respect thereto) unless required by applicable law or the

official interpretation or administration thereof. The Issuer expects that standing customer instructions and customary practices will govern payments by participants to owners of Book Entry Interests held through such participants.

Under the terms of the indenture governing the notes, the Issuer, the Trustee and any agent of the Issuer or the Trustee will treat the registered holders of the Global Notes (*e.g.*, Euroclear or Clearstream (or their respective nominees)) as the owner thereof for the purpose of receiving payments and for all other purposes. Consequently, none of the Issuer, the Trustee, any paying agent or any of their respective agents has or will have any responsibility or liability for:

- any aspect of the records of Euroclear, Clearstream or any participant or indirect participant relating to, or payments made on account of, a Book Entry Interest or for maintaining, supervising or reviewing the records of Euroclear or Clearstream or any participant or indirect participant relating to, or payments made on account of, a Book Entry Interest;
- Euroclear, Clearstream or any participant or indirect participant; or
- the records of the Common Depositary.

Payments by participants to owners of Book Entry Interests held through participants are the responsibility of such participants.

Action by Owners of Book Entry Interests

The Issuer understands that Euroclear and Clearstream will take any action permitted to be taken by a holder of notes (including the presentation of notes for exchange as described above) only at the direction of one or more participants to whose account the Book Entry Interests in the Global Notes are credited and only in respect of such portion of the aggregate principal amount of notes as to which such participant or participants has or have given such direction. Euroclear and Clearstream will not exercise any discretion in the granting of consents or waivers or the taking of any other action in respect of the Global Notes. However, if there is an Event of Default and commencement of enforcement action under the indenture governing the notes, Euroclear and Clearstream, at the request of the holders of the notes, reserve the right to exchange the Global Notes for Definitive Registered Notes, and to distribute such Definitive Registered Notes to their respective participants.

Transfers

The Issuer understands that transfers between participants in Euroclear or Clearstream will be effected in accordance with Euroclear and Clearstream's rules and will be settled in immediately available funds. If a holder of notes requires physical delivery of Definitive Registered Notes for any reason, including to sell notes to persons in jurisdictions which require physical delivery of such securities or to pledge such securities, such holder must transfer its interests in the Global Notes in accordance with the normal procedures of Euroclear and Clearstream and in accordance with the procedures set forth in the indenture governing the notes.

The notes will bear a legend to the effect set forth under "Transfer Restrictions". Prior to the expiration of the Distribution Compliance Period, Regulation S Book Entry Interests may be transferred only to non-U.S. persons under Regulation S, qualified institutional buyers under Rule 144A or institutional accredited investors. Book Entry Interests in the Global Notes will be subject to the restrictions on transfers and certification requirements discussed under "Transfer Restrictions." Transfers of Book Entry Interests to persons wishing to take delivery of Book Entry Interests will at all times be subject to such transfer restrictions.

Rule 144A Book Entry Interests may be transferred to a person who takes delivery in the form of a Regulation S Book Entry Interest only upon delivery by the transferor of a written certification (in the form to be provided in the indenture governing the notes) to the effect that such transfer is being made in accordance with Regulation S or Rule 144 under the Securities Act or any other exemption (if available under the Securities Act).

Regulation S Book Entry Interests may be transferred to a Person who takes delivery in the form of a Rule 144A Book Entry Interest only upon delivery by the transferor of a written certification (in the form to be provided

in the indenture governing the notes) to the effect that such transfer is being made to a Person who the transferor reasonably believes is a "qualified institutional buyer" within the meaning of Rule 144A under the Securities Act in a transaction meeting the requirements of Rule 144A under the Securities Act or otherwise in accordance with the transfer restrictions described under "Transfer Restrictions" and in accordance with any applicable securities laws of any other jurisdiction.

In connection with transfers involving an exchange of a Regulation S Book Entry Interest for a Rule 144A Book Entry Interest or an exchange of a Rule 144A Book Entry Interest for a Regulation S Book Entry Interest, appropriate adjustments will be made to reflect a decrease in the principal amount of the Regulation S Global Note or Rule 144A Global Note, as applicable, and a corresponding increase in the principal amount of the Rule 144A Global Note or Regulation S Global Note, as applicable.

Definitive Registered Notes may be transferred and exchanged for Book Entry Interests in a Global Note only in accordance with the provisions of the indenture governing the notes, and, if required, only if the transferor first delivers to the Trustee a written certificate (in the form to be provided in the indenture governing the notes) to the effect that such transfer will comply with the appropriate transfer restrictions applicable to such notes. See "Transfer Restrictions."

Any Book Entry Interest is one of the Global Notes that is transferred to a Person who takes delivery in the form of a Book Entry Interest in any other Global Note will, upon transfer, cease to be a Book Entry Interest in the first mentioned Global Note and become a Book Entry Interest in such other Global Note, and accordingly will thereafter be subject to all transfer restrictions, if any, and other procedures applicable to Book Entry Interests in such other Global Note for as long as it remains such a Book Entry Interest.

Information Concerning Euroclear and Clearstream

All Book Entry Interests will be subject to the operations and procedures of Euroclear and Clearstream, as applicable. The Issuer provides the following summaries of those operations and procedures solely for the convenience of investors. The operations and procedures of the settlement system are controlled by the settlement system and may be changed at any time. None of the Issuer, the Trustee, any paying agent or the initial purchasers is responsible for those operations or procedures.

The Issuer understands as follows with respect to Euroclear and Clearstream: Euroclear and Clearstream hold securities for participating organizations. They facilitate the clearance and settlement of securities transactions between their participants through electronic book entry changes in the accounts of such participants, thereby eliminating the need for physical movement of certificates. Euroclear and Clearstream provide various services to their participants, including the safekeeping, administration, clearance, settlement, lending and borrowing of internationally traded securities. Euroclear and Clearstream interface with domestic securities markets. Euroclear and Clearstream participants are financial institutions such as underwriters, securities brokers and dealers, banks, trust companies and certain other organizations. Indirect access to Euroclear and Clearstream is also available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Euroclear and Clearstream participant, either directly or indirectly.

Because Euroclear and Clearstream can only act on behalf of participants, who in turn act on behalf of indirect participants and certain banks, the ability of an owner of a beneficial interest to pledge such interest to persons or entities that do not participate in the Euroclear and/or Clearstream system, or otherwise take actions in respect of such interest, may be limited by the lack of a definitive certificate for that interest. The laws of some jurisdictions, including certain states of the United States, may require that certain purchasers of securities take physical delivery of those securities in definitive form. The foregoing limitations may impair your ability to own, transfer or pledge Book Entry Interests. In addition, owners of beneficial interests through the Euroclear or Clearstream systems will receive distributions attributable to the Global Notes only through Euroclear or Clearstream participants.

Global Clearance and Settlement Under the Book Entry System

The Issuer understands that transfers of interests in the Global Notes between participants in Euroclear or Clearstream will be effected in the ordinary way in accordance with their respective system's rules and operating procedures.

Although Euroclear and Clearstream currently follow the foregoing procedures in order to facilitate transfers of interests in the Global Notes among participants in Euroclear or Clearstream, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued or modified at any time. None of the Issuer, the Trustee or any paying agent will have any responsibility for the performance by Euroclear, Clearstream or their participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

You should be aware that investors will only be able to make and receive deliveries, payments and other communications involving the notes through Clearstream and Euroclear systems on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States.

In addition, because of time-zone differences, there may be problems with completing transactions involving Clearstream and Euroclear systems on the same business day as in the United States. U.S. investors who wish to transfer their interests in the notes, or to make or receive a payment or delivery of the notes, on a particular day, may find that the transactions will not be performed until the next business day in Luxembourg or Brussels, depending on whether the Clearstream or Euroclear system is used.

Initial Settlement

Initial settlement for the notes will be made in euros. Book Entry Interests owned through Euroclear or Clearstream accounts will follow the settlement procedures applicable to conventional bonds in registered form. Book Entry Interests will be credited to the securities custody accounts of Euroclear and Clearstream holders of notes on the Business Day following the settlement date against payment for value of the settlement date.

Secondary Market Trading

The Book Entry Interests will trade through participants of Euroclear and Clearstream and will settle in same day funds. The Issuer understands that, since the purchase determines the place of delivery, it is important to establish at the time of trading of any Book Entry Interests where both the purchaser's and the seller's accounts are located to ensure that settlement can be made on the desired value date.

TRANSFER RESTRICTIONS

The notes are subject to restrictions on transfer as summarized below. By purchasing notes, you will be deemed to have made the following acknowledgements, representations to and agreements with us and the initial purchasers:

(1) You acknowledge that:

- the notes have not been registered under the Securities Act or any other securities laws and are being offered for resale in transactions that do not require registration under the Securities Act or any other securities laws; and

- unless so registered, the notes may not be offered, sold or otherwise transferred except under an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act or any other applicable securities laws, and in each case in compliance with the conditions for transfer set forth in paragraph 5 below.

(2) You acknowledge that this offering circular relates to an offering that is exempt from registration under the Securities Act and may not comply in important respects with SEC rules that would apply to an offering document relating to a public offering of securities.

(3) You represent that you are not an affiliate (as defined in Rule 144 under the Securities Act) of ours, that you are not acting on our behalf and that either:

- you are a qualified institutional buyer (as defined in Rule 144A under the Securities Act) and are purchasing notes for your own account or for the account of another qualified institutional buyer, and you are aware that the initial purchasers are selling the notes to you in reliance on Rule 144A; or

- you are not a U.S. person (as defined in Regulation S under the Securities Act) or purchasing for the account or benefit of a U.S. person, other than a distributor, and you are purchasing notes in an offshore transaction in accordance with Regulation S.

(4) You acknowledge that neither we nor the initial purchasers nor any person representing us or the initial purchasers have made any representation to you with respect to us or this offering of notes, other than the information contained or incorporated by reference in this offering circular. Accordingly, you acknowledge that no representation or warranty is made by the initial purchasers as to the accuracy or completeness of such materials. You represent that you are relying only on the information contained or incorporated by reference in this offering circular in making your investment decision with respect to the notes. You agree that you have had access to such financial and other information concerning us and the notes as you have deemed necessary in connection with your decision to purchase notes, including an opportunity to ask questions of and request information from us.

(5) You represent that you are purchasing notes for your own account, or for one or more investor accounts for which you are acting as a fiduciary or agent, in each case not with a view to, or for offer or sale in connection with, any distribution of the notes in violation of the Securities Act, subject to any requirement of law that the disposition of your property or the property of that investor account or accounts be at all times within your or their control and subject to your or their ability to resell the notes pursuant to Rule 144A or any other available exemption from registration under the Securities Act. You agree on your own behalf and on behalf of any investor account for which you are purchasing notes, and each subsequent holder of the notes by its acceptance of the notes will agree, that until the end of the Resale Restriction Period (as defined below), the notes may be offered, sold or otherwise transferred only:

(a) to us or any of our subsidiaries;

(b) under a registration statement that has been declared effective under the Securities Act;

(c) for so long as the notes are eligible for resale under Rule 144A, to a person the seller reasonably believes is a qualified institutional buyer that is purchasing for its own account or for the account of another qualified institutional buyer and to whom notice is given that the transfer is being made in reliance on Rule 144A;

(d) through offers and sales to non-U.S. persons that occur outside the United States within the meaning of Regulation S under the Securities Act;

(e) to an institutional accredited investor (within the meaning of Rule 501(a)(1), (2), (3) or (7) under the Securities Act) that is not a qualified institutional buyer and that is purchasing for its own account or for the account of another institutional accredited investor, in each case in a minimum principal amount of notes of $250,000; or

(f) under any other available exemption from the registration requirements of the Securities Act,

subject in each of the above cases to any requirement of law that the disposition of the seller's property or the property of an investor account or accounts be at all times within the seller or account's control and to compliance with any applicable state securities laws. Notwithstanding the above, holders will not be permitted to transfer the notes in reliance on Rule 144 even after the applicable holding period has been satisfied.

You also acknowledge that to the extent that you hold the notes through an interest in a global note, the Resale Restriction Period (as defined below) may continue until one year after the issuer, or any affiliate of the issuer, was the owner of such note or an interest in such global note, and so may continue indefinitely.

(6) You also acknowledge that:

- the above restrictions on resale will apply from the closing date until the date that is six months (in the case of Rule 144A notes) after the later of the closing date, the closing date of the issuance of any additional notes and the last date that we or any of our affiliates was the owner of the notes or any predecessor of the notes or 40 days (in the case of Regulation S notes) after the later of the closing date, the closing date of the issuance of any additional notes and when the notes or any predecessor of the notes are first offered to persons other than distributors (as defined in Rule 902 of Regulation S) in reliance on Regulation S (the "Resale Restriction Period"), and will not apply after the applicable Resale Restriction Period ends;

- if a holder of notes proposes to resell or transfer notes under clause (e) above before the applicable Resale Restriction Period ends, the seller must deliver to us and the trustee a letter from the purchaser in the form set forth in the indenture which must provide, among other things, that the purchaser is an institutional accredited investor that is acquiring the notes not for distribution in violation of the Securities Act;

- we and the trustee reserve the right to require in connection with any offer, sale or other transfer of notes under clauses (d), (e) and (f) above the delivery of an opinion of counsel, certifications and/or other information satisfactory to us and the trustee; and

- each note will contain a legend substantially to the following effect:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION. THE HOLDER OF THIS SECURITY, BY ITS ACCEPTANCE HEREOF, AGREES ON ITS OWN BEHALF AND ON BEHALF OF ANY INVESTOR ACCOUNT FOR WHICH IT HAS PURCHASED SECURITIES, TO OFFER, SELL OR OTHERWISE TRANSFER SUCH SECURITY,

PRIOR TO THE DATE (THE "RESALE RESTRICTION TERMINATION DATE") THAT IS [*IN THE CASE OF RULE 144A NOTES:* SIX MONTHS AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF, THE ORIGINAL ISSUE DATE OF THE ISSUANCE OF ANY ADDITIONAL NOTES AND THE LAST DATE ON WHICH THE ISSUER OR ANY AFFILIATE OF THE ISSUER WAS THE OWNER OF THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY),] [*IN THE CASE OF REGULATION S NOTES:* 40 DAYS AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF, THE ORIGINAL ISSUE DATE OF THE ISSUANCE OF ANY ADDITIONAL NOTES AND THE DATE ON WHICH THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) WAS FIRST OFFERED TO PERSONS OTHER THAN DISTRIBUTORS (AS DEFINED IN RULE 902 OF REGULATION S) IN RELIANCE ON REGULATION S], ONLY (A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF, (B) PURSUANT TO A REGISTRATION STATEMENT THAT HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, (C) FOR SO LONG AS THE SECURITIES ARE ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT ("RULE 144A"), TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (D) PURSUANT TO OFFERS AND SALES TO NON-U.S. PERSONS THAT OCCUR OUTSIDE THE UNITED STATES WITHIN THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, (E) TO AN INSTITUTIONAL "ACCREDITED INVESTOR" WITHIN THE MEANING OF RULE 501(a)(1), (2), (3) OR (7) UNDER THE SECURITIES ACT THAT IS NOT A QUALIFIED INSTITUTIONAL BUYER AND THAT IS PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ANOTHER INSTITUTIONAL ACCREDITED INVESTOR, IN EACH CASE IN A MINIMUM PRINCIPAL AMOUNT OF SECURITIES OR (F) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO THE COMPANY'S AND THE TRUSTEE'S RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSES (C), (D), (E) OR (F) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/ OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER AFTER THE RESALE RESTRICTION TERMINATION DATE. [*IN THE CASE OF REGULATION S NOTES*: BY ITS ACQUISITION HEREOF, THE HOLDER HEREOF REPRESENTS THAT IT IS NOT A U.S. PERSON NOR IS IT PURCHASING FOR THE ACCOUNT OF A U.S. PERSON AND IS ACQUIRING THIS SECURITY IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH REGULATION S UNDER THE SECURITIES ACT.] IN ADDITION, HOLDERS WILL NOT BE PERMITTED TO TRANSFER THE NOTES IN RELIANCE ON RULE 144 EVEN AFTER ANY APPLICABLE HOLDING PERIOD HAS BEEN SATISFIED.

BY ITS ACQUISITION OF THIS SECURITY, THE HOLDER THEREOF WILL BE DEEMED TO HAVE REPRESENTED AND WARRANTED THAT EITHER (1) NO PORTION OF THE ASSETS USED BY SUCH HOLDER TO ACQUIRE OR HOLD THIS SECURITY CONSTITUTES THE ASSETS OF AN EMPLOYEE BENEFIT PLAN THAT IS SUBJECT TO TITLE I OF THE U.S. EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, AS AMENDED ("ERISA"), OF A PLAN, INDIVIDUAL RETIREMENT ACCOUNT OR OTHER ARRANGEMENT THAT IS SUBJECT TO SECTION 4975 OF THE U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE "CODE") OR PROVISIONS UNDER ANY OTHER FEDERAL, STATE, LOCAL, NON-U.S. OR OTHER LAWS OR REGULATIONS THAT ARE SIMILAR TO SUCH PROVISIONS OF ERISA OR THE CODE ("SIMILAR LAWS"), OR OF AN ENTITY WHOSE UNDERLYING ASSETS ARE CONSIDERED TO INCLUDE "PLAN ASSETS" OF ANY SUCH PLAN, ACCOUNT OR ARRANGEMENT, OR (2) THE ACQUISITION AND HOLDING OF THIS SECURITY WILL NOT CONSTITUTE A NON-EXEMPT PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA OR SECTION 4975 OF THE CODE OR A SIMILAR VIOLATION UNDER ANY APPLICABLE SIMILAR LAWS.

(7) You represent and warrant that either (i) no portion of the assets used by you to acquire or hold the notes (or any interest therein) constitutes assets of any employee benefit plan subject to Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended ("ERISA"), any plan, account or other arrangement that is subject to Section 4975 of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), or provisions under any other federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code ("Similar Laws"), or an entity whose underlying assets are considered to include "plan assets" of any such plan, account or arrangement (each, a "Plan"), or (ii) the acquisition and holding of the notes (or any interest therein) by you will not constitute a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the

Code or a similar violation under any applicable Similar Law. Additionally, if you are using assets of any Plan to acquire or hold the notes, you will be deemed to represent that neither we, the initial purchasers, the guarantors nor any of our or their respective affiliates has acted as your fiduciary, or has been relied upon for any advice, with respect to your decision to acquire or hold the notes.

(8) You acknowledge that we, the initial purchasers and others will rely upon the truth and accuracy of the above acknowledgments, representations and agreements. You agree that if any of the acknowledgments, representations or agreements you are deemed to have made by your purchase of notes is no longer accurate, you will promptly notify us and the initial purchasers. If you are purchasing any notes as a fiduciary or agent for one or more investor accounts, you represent that you have sole investment discretion with respect to each of those accounts and that you have full power to make the above acknowledgments, representations and agreements on behalf of each account.

CERTAIN UNITED STATES FEDERAL TAX CONSEQUENCES

The following is a summary of certain United States federal income and, in the case of Non-U.S. Holders (as defined below), estate tax consequences of the purchase, ownership and disposition of the notes as of the date hereof. This summary deals only with notes that are held as capital assets by holders who purchase the notes for cash upon original issuance at their initial offering price.

This summary does not represent a detailed description of the United States federal income tax consequences applicable to you if you are subject to special treatment under the United States federal income tax laws, including if you are:

- a dealer in securities or currencies;
- a financial institution;
- a regulated investment company;
- a real estate investment trust;
- a tax-exempt entity;
- an insurance company;
- a controlled foreign corporation;
- a passive foreign investment company;
- a person holding the notes as part of a hedging, integrated, conversion or constructive sale transaction or a straddle;
- a trader in securities that has elected the mark-to-market method of accounting for your securities;
- a person liable for alternative minimum tax;
- a partnership or other pass-through entity for United States federal income tax purposes;
- a person required to accelerate the recognition of any item of gross income with respect to the notes as a result of such income being recognized on an applicable financial statement;
- a U.S. Holder (as defined below) whose "functional currency" is not the United States dollar; or
- a United States expatriate.

If an entity treated as a partnership for United States federal income tax purposes holds notes, the tax treatment of a partner in that partnership will generally depend upon the status of the partner and the activities of the partnership. If you are a partnership or a partner in a partnership considering an investment in the notes, you should consult your tax advisors regarding the tax consequences of the purchase, ownership and disposition of the notes.

This summary is based upon provisions of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations, rulings and judicial decisions as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in United States federal income and estate tax consequences different from those summarized below. We have not and will not seek any rulings from the Internal Revenue Service ("IRS") regarding the matters discussed below. There can be no assurance that the IRS will not take positions concerning the tax consequences of the purchase, ownership or disposition of the notes that are different from those discussed below.

This summary does not address all aspects of United States federal income and estate taxes and does not deal with foreign, state, local or other tax considerations that may be relevant to holders in light of their personal circumstances. We cannot assure you that a change in law will not alter significantly the tax considerations that we describe in this summary.

If you are considering the purchase of notes, you should consult your own tax advisors concerning the United States federal income and estate tax consequences to you of the purchase, ownership and disposition of the notes, as well as the consequences to you arising under other United States federal tax laws and the laws of any other taxing jurisdiction.

Consequences to U.S. Holders

The following is a summary of certain United States federal income tax consequences that will apply to you if you are a U.S. Holder.

A "U.S. Holder" means a beneficial owner of the notes (other than an entity treated as a partnership for United States federal income tax purposes) that is, for United States federal income tax purposes, any of the following:

- an individual citizen or resident of the United States;
- a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to United States federal income taxation regardless of its source; or
- a trust if it (1) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable United States Treasury regulations to be treated as a United States person.

Payments of Interest

With respect to the notes, if you use the cash method of accounting for United States federal income tax purposes, you will be required to include in income the U.S. dollar value of the amount of interest received on such notes, determined by translating the euros received at the spot rate for euros on the date such payment is received, regardless of whether the payment is in fact converted into U.S. dollars. You will not recognize foreign currency exchange gain or loss with respect to the receipt of such payment (but may recognize foreign currency exchange gain or loss on the disposition of the euros so received).

If you use the accrual method of accounting for United States federal income tax purposes, you may determine the amount of income recognized with respect to interest on the notes in accordance with either of two methods. Under the first method you will be required to include in income for each taxable year the U.S. dollar value of the interest that has accrued on the notes held during such year, determined by translating such interest at the average rate of exchange for the period or periods (or portions thereof) within such year during which such interest accrued. Under the second method, you may elect to translate interest income at the spot rate on:

- the last day of the accrual period;
- the last day of the taxable year, if the accrual period straddles your taxable year; or
- the date the interest payment is received if such date is within five business days of the end of the accrual period.

If you elect to use the second method, the election must be consistently applied by you to all debt instruments from year to year and can be changed only with the consent of the IRS.

If you use the accrual method of accounting, upon receipt of an interest payment on a note (including, upon the sale or other disposition of a note, the receipt of amounts attributable to accrued interest previously included in income), you will recognize foreign currency exchange gain or loss (generally taxable as United States source ordinary income or loss) in an amount equal to the difference, if any, between the U.S. dollar value of such payment (determined by translating the euros received at the spot rate on the date such payment is received) and the U.S. dollar value of the interest income you previously included in income with respect to such payment (as determined above).

Sale, Exchange, Retirement, Redemption or other Taxable Disposition of Notes

Upon the sale, exchange, retirement, redemption or other taxable disposition of a note, you will recognize gain or loss equal to the difference between the amount you realize upon the sale, exchange, retirement, redemption or other taxable disposition (less an amount equal to any accrued but unpaid qualified stated interest, which will be taxable as interest income to the extent not previously included in income) and your adjusted tax basis in the note. Your adjusted tax basis in a note will generally be your U.S. dollar cost for that note. Your U.S. dollar cost generally will be the U.S. dollar value of the euros paid for such note determined at the spot rate on the date of such purchase. If your note is sold, exchanged, retired, redeemed or otherwise disposed of in a taxable transaction for euros, then your amount realized generally will be based on the spot rate in effect on the date of such sale, exchange, retirement or other taxable disposition. If, however, you are a cash method taxpayer and the notes are traded on an established securities market for United States federal income tax purposes, euros received will be translated into U.S. dollars at the spot rate on the settlement date of the sale, exchange, retirement, redemption or other taxable disposition. If you use the accrual method of accounting for United States federal income tax purposes, you may elect the same treatment with respect to the sale of notes traded on an established securities market, provided that such election is applied consistently to all debt instruments held by you from year to year. Such election cannot be changed without the consent of the IRS. An accrual method taxpayer that does not make the election described above will recognize foreign currency exchange gain or loss (generally taxable as United States source ordinary income or loss) upon the sale, exchange, retirement, redemption or other taxable disposition of a note to the extent that the U.S. dollar value of the euros received (based on the spot rate on the settlement date) differs from the U.S. dollar value of the amount realized on the disposition date.

Except with respect to gain or loss attributable to changes in exchange rates as discussed below with respect to notes, any gain or loss you recognize will generally be capital gain or loss and will generally be long-term capital gain or loss if you have held the note for more than one year. Long-term capital gains of non-corporate U.S. Holders (including individuals) are eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations. Any gain or loss you recognize will generally be treated as United States source gain or loss.

A portion of your gain or loss with respect to the principal amount of a note may be treated as foreign currency exchange gain or loss. Foreign currency exchange gain or loss will generally be treated as United States source ordinary income or loss. For these purposes, the principal amount of the note is your purchase price for the note calculated in euros on the date of purchase, and the amount of foreign currency exchange gain or loss recognized is equal to the difference between (i) the U.S. dollar value of the principal amount determined at the spot rate on the date of the sale, exchange, retirement or other taxable disposition of the note (or, possibly, in the case of cash basis or electing accrual basis taxpayers, the settlement date of such disposition, provided the note is treated as traded on an established securities market for United States federal income tax purposes) and (ii) the U.S. dollar value of the principal amount determined at the spot rate on the date you purchased the note. The amount of foreign currency exchange gain or loss recognized on the disposition of a note (with respect to both principal and accrued interest) will be limited to the amount of overall gain or loss recognized on the disposition of a note.

Disposition of Euros

Your tax basis in euros received as interest on a note or on the sale, exchange, retirement, redemption or other taxable disposition of a note will be the U.S. dollar value thereof at the spot rate in effect on the date the euros are received. Any gain or loss recognized by you on a sale, exchange, retirement, redemption or other taxable

disposition of the euros will generally be treated as United States source foreign currency exchange gain or loss (taxable as ordinary income or loss).

Reportable Transactions

United States Treasury regulations meant to require the reporting of certain tax shelter transactions could be interpreted to cover transactions generally not regarded as tax shelters, including certain foreign currency transactions. Under the United States Treasury regulations, certain transactions are required to be reported to the IRS, including, in certain circumstances, a sale, exchange, retirement, redemption or other taxable disposition of a note, or euros received in respect of a note, to the extent that such sale, exchange, retirement, redemption or other taxable disposition results in a tax loss in excess of a threshold amount. If you are considering the purchase of notes, you should consult with your own tax advisors to determine the tax return obligations, if any, with respect to an investment in such notes, including any requirement to file IRS Form 8886 (Reportable Transaction Disclosure Statement).

Consequences to Non-U.S. Holders

The following is a summary of certain United States federal income and estate tax consequences that will apply to you if you are a Non-U.S. Holder. A "Non-U.S. Holder" means a beneficial owner of the notes (other than an entity treated as a partnership for United States federal income tax purposes) that is not a U.S. Holder.

United States Federal Withholding Tax

Subject to the discussions of backup withholding and FATCA below, United States federal withholding tax will not apply to any payment of interest on the notes under the "portfolio interest rule," provided that:

- interest paid on the notes is not effectively connected with your conduct of a trade or business in the United States;
- you do not actually (or constructively) own stock possessing 10% or more of the total combined voting power of all classes of our voting stock within the meaning of the Code and applicable United States Treasury regulations;
- you are not a controlled foreign corporation that is related to us through stock ownership;
- you are not a bank whose receipt of interest on the notes is described in Section 881(c)(3)(A) of the Code; and
- either (a) you provide your name and address on an applicable IRS Form W-8, and certify, under penalties of perjury, that you are not a United States person as defined under the Code or (b) you hold your notes through certain foreign intermediaries and satisfy the certification requirements of applicable United States Treasury regulations.

If you cannot satisfy the requirements described above, payments of interest made to you will be subject to a 30% United States federal withholding tax, unless you provide the applicable withholding agent with a properly executed:

- IRS Form W-8BEN or Form W-8BEN-E, as applicable (or other applicable form) claiming an exemption from or reduction in withholding under the benefit of an applicable income tax treaty; or
- IRS Form W-8ECI (or other applicable form) stating that interest paid on the notes is not subject to withholding tax because it is effectively connected with your conduct of a trade or business in the United States (as discussed below under "—United States Federal Income Tax").

The 30% United States federal withholding tax generally will not apply to any payment of principal or gain that you recognize on the sale, exchange, retirement, redemption or other taxable disposition of a note.

United States Federal Income Tax

If you are engaged in a trade or business in the United States and interest on the notes is effectively connected with the conduct of that trade or business, you will be subject to United States federal income tax on that interest on a net income basis in generally the same manner as if you were a United States person as defined under the Code, unless an applicable income tax treaty provides otherwise. In addition, if you are a corporation, you may be subject to a branch profits tax equal to 30% (or a lower applicable income tax treaty rate) of your effectively connected earnings and profits, subject to adjustments. Any effectively connected interest will be exempt from the 30% United States federal withholding tax, provided the certification requirements discussed above in "—United States Federal Withholding Tax" are satisfied.

Subject to the discussion of backup withholding below, any gain recognized on the sale, exchange, retirement, redemption or other taxable disposition of a note generally will not be subject to United States federal income tax unless:

- the gain is effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a United States permanent establishment), in which case such gain will generally be subject to United States federal income tax (and possibly branch profits tax) in the same manner as effectively connected interest as described above; or

- you are an individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case, unless an applicable income tax treaty provides otherwise, you will be subject to a 30% United States federal income tax on the gain recognized on the sale, exchange, retirement, redemption or other taxable disposition, which may be offset by certain United States source capital losses.

United States Federal Estate Tax

If you are an individual and are not a United States citizen or a resident of the United States (as specifically defined for United States federal estate tax purposes), your estate will not be subject to United States federal estate tax on notes beneficially owned by you at the time of your death, provided that any payment to you of interest on the notes, if received at such time, would be eligible for exemption from the 30% United States federal withholding tax under the "portfolio interest rule" described above under "—United States Federal Withholding Tax," without regard to the statement requirement described in the fifth bullet point of that section.

Information Reporting and Backup Withholding

U.S. Holders

In general, information reporting requirements will apply to payments of interest and principal on a note and the proceeds from the sale, exchange, retirement, redemption or other taxable disposition of a note paid to you, unless you are an exempt recipient. A backup withholding tax may apply to such payments if you fail to provide a taxpayer identification number or a certification of exempt status, or if you fail to report in full dividend and interest income.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your United States federal income tax liability provided the required information is timely furnished to the IRS.

Non-U.S. Holders

Interest paid to you and the amount of tax, if any, withheld with respect to those payments generally will be reported to the IRS. Copies of the information returns reporting such interest payments and any withholding may also be made available to the tax authorities in the country in which you reside under the provisions of an applicable income tax treaty.

In general, you will not be subject to backup withholding with respect to payments of interest on the notes provided that the applicable withholding agent does not have actual knowledge or reason to know that you are a United States person as defined under the Code, and such withholding agent has received from you the required certification described above in the fifth bullet point under "—Consequences to Non-U.S. Holders—United States Federal Withholding Tax."

Information reporting and, depending on the circumstances, backup withholding may apply to the proceeds of a sale, exchange, retirement, redemption or other taxable disposition of notes within the United States or conducted through certain United States-related financial intermediaries, unless you certify to the applicable withholding agent under penalties of perjury that you are a Non-U.S. Holder (and the payor does not have actual knowledge or reason to know that you are a United States person as defined under the Code), or you otherwise establish an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your United States federal income tax liability provided the required information is timely furnished to the IRS.

Additional Withholding Requirements

Under Sections 1471 through 1474 of the Code (such Sections commonly referred to as "FATCA"), a 30% United States federal withholding tax may apply to any interest income paid on the notes to (i) a "foreign financial institution" (as specifically defined in the Code) that does not provide sufficient documentation, typically on IRS Form W-8BEN-E, evidencing either (x) an exemption from FATCA, or (y) its compliance (or deemed compliance) with FATCA (which may alternatively be in the form of compliance with an intergovernmental agreement with the United States) in a manner that avoids withholding, or (ii) a "non-financial foreign entity" (as specifically defined in the Code) that does not provide sufficient documentation, typically on IRS Form W-8BEN-E, evidencing either (x) an exemption from FATCA, or (y) adequate information regarding certain substantial United States beneficial owners of such entity (if any). These rules generally apply regardless of whether the foreign financial institution or non-financial foreign entity is the beneficial owner of the notes or an intermediary. If an interest payment is both subject to withholding under FATCA and subject to the withholding tax discussed above under "—Consequences to Non-U.S. Holders—United States Federal Withholding Tax," the withholding under FATCA may be credited against, and therefore reduce, such other withholding tax. You should consult your own tax advisors regarding these rules and whether they may be relevant to your ownership of the notes.

CERTAIN ERISA CONSIDERATIONS

The following is a summary of certain considerations associated with the purchase and holding of the notes by employee benefit plans that are subject to Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended ("ERISA"), plans, individual retirement accounts and other arrangements that are subject to Section 4975 of the U.S. Internal Revenue Code of 1986, as amended (the "Code," including the regulations promulgated and the rules issued thereunder) or provisions under any other federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, "Similar Laws"), and entities whose underlying assets are considered to include "plan assets" (within the meaning of 29 C.F.R. Section 2510.3-101, as modified by Section 3(42) of ERISA) of any such plan, account or arrangement (each, a "Plan").

General Fiduciary Matters

ERISA and the Code impose certain duties on persons who are fiduciaries of a Plan subject to Part 4 of Title I of ERISA or Section 4975 of the Code (an "ERISA Plan") and prohibit certain transactions involving the assets of an ERISA Plan and its fiduciaries or other interested parties. Under ERISA and the Code, any person who exercises any discretionary authority or control over the administration of such an ERISA Plan or the management or disposition of the assets of such an ERISA Plan, or who renders investment advice for a fee or other compensation to such an ERISA Plan, is generally considered to be a fiduciary of the ERISA Plan.

In considering an investment in the notes of a portion of the assets of any Plan, a fiduciary should determine whether the investment is in accordance with the documents and instruments governing the Plan and the applicable provisions of ERISA, the Code or any Similar Law relating to a fiduciary's duties to the Plan including, without limitation, the prudence, diversification, delegation of control and prohibited transaction provisions of ERISA, the Code and any other applicable Similar Laws.

Prohibited Transaction Issues

Section 406 of ERISA and Section 4975 of the Code prohibit ERISA Plans from engaging in specified transactions involving plan assets with persons or entities who are "parties in interest," within the meaning of ERISA, or "disqualified persons," within the meaning of Section 4975 of the Code, unless an exemption is available. A party in interest or disqualified person who engaged in a non-exempt prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and the Code. In addition, the fiduciary of the ERISA Plan that engaged in such a non-exempt prohibited transaction may be subject to penalties and liabilities under ERISA and the Code. The acquisition and/or holding of notes by an ERISA Plan with respect to which the Issuer, a guarantor or an initial purchaser is considered a party in interest or a disqualified person may constitute or result in a direct or indirect prohibited transaction under Section 406 of ERISA and/or Section 4975 of the Code, unless the investment is acquired and is held in accordance with an applicable statutory, class or individual prohibited transaction exemption. In this regard, the U.S. Department of Labor has issued prohibited transaction class exemptions, or "PTCEs," that may apply to the acquisition and holding of the notes. These class exemptions include, without limitation, PTCE 84-14 respecting transactions determined by independent qualified professional asset managers, PTCE 90-1 respecting insurance company pooled separate accounts, PTCE 91-38 respecting bank collective investment funds, PTCE 95-60 respecting life insurance company general accounts and PTCE 96-23 respecting transactions determined by in-house asset managers. In addition, Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code provide relief from the prohibited transaction provisions of ERISA and Section 4975 of the Code for certain transactions, provided that neither the issuer of the securities nor any of its affiliates (directly or indirectly) have or exercise any discretionary authority or control or render any investment advice with respect to the assets of any ERISA Plan involved in the transaction and provided further that the ERISA Plan receives no less, nor pays no more, than adequate consideration in connection with the transaction. Each of the above-noted exemptions contains conditions and limitations on its application. Fiduciaries of Plans considering acquiring and/or holding the notes in reliance on these or any other exemption should carefully review the exemption to ensure it is applicable. There can be no assurance that all of the conditions of any such exemptions will be satisfied.

Because of the foregoing, the notes should not be purchased or held by any person investing "plan assets" of any Plan, unless such purchase and holding will not constitute a non-exempt prohibited transaction under ERISA and the Code or similar violation of any applicable Similar Laws.

Representation

Accordingly, by acceptance of a note, each purchaser and subsequent transferee of a note will be deemed to have represented and warranted that either (i) no portion of the assets used by such purchaser or transferee to acquire or hold the notes (or any interest therein) constitutes assets of any Plan or (ii) the purchase and holding of the notes (or any interest therein) by such purchaser or transferee will not constitute a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or a similar violation under any applicable Similar Laws. Additionally, if any purchaser of a note is using assets of any Plan to acquire or hold the notes, such purchaser will be deemed to represent that neither the Issuer, the initial purchasers, the guarantors nor any of their respective affiliates has acted as the Plan's fiduciary, or has been relied upon for any advice, with respect to the purchaser's decision to acquire or hold the notes.

The foregoing discussion is general in nature and is not intended to be all inclusive nor should it be construed as legal advice. Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries, or other persons considering purchasing the notes on behalf of, or with the assets of, any Plan, consult with their counsel regarding the potential applicability of ERISA, Section 4975 of the Code and any Similar Laws to such investment and whether an exemption would be applicable to the purchase and holding of the notes. Purchasers have exclusive responsibility for ensuring that their purchase and holding of the notes do not violate the fiduciary responsibility or prohibited transaction rules of ERISA, the Code, or any applicable Similar Laws. Except as otherwise stated herein, the sale of any notes to a Plan is in no respect a representation by the Issuer, an initial purchaser, or any of their respective affiliates or representatives that such an investment meets all legal requirements with respect to such investments by any such Plan generally or any particular Plan, or that such investment is appropriate for such Plans generally or any particular Plan.

PLAN OF DISTRIBUTION

Goldman Sachs & Co. LLC and Citigroup Global Markets Limited are acting as representatives of each of the initial purchasers named below in connection with the offering of the notes. Subject to the terms and conditions set forth in a purchase agreement among us, the guarantors, and the representatives on behalf of the several initial purchasers party thereto, we have agreed to sell to the initial purchasers, and each of the initial purchasers has agreed, severally and not jointly, to purchase from us, the respective principal amount of the notes set forth opposite its name in the following table.

Initial Purchasers	Principal Amount of Notes
Goldman Sachs & Co. LLC	€
Citigroup Global Markets Limited	
Barclays Bank PLC	
J.P. Morgan Securities plc	
Merrill Lynch International	
PNC Capital Markets LLC	
HSBC Securities (USA) Inc.	
Jefferies International Limited	
Total	€ 550,000,000

Subject to the terms and conditions set forth in the purchase agreement, the initial purchasers have agreed, severally and not jointly, to purchase all of the notes sold under the purchase agreement if any of these notes are purchased. If an initial purchaser defaults, the purchase agreement provides that, in certain circumstances, the purchase commitments of the non-defaulting initial purchasers of the notes may be increased or the purchase agreement may be terminated.

The Issuer and the guarantors have agreed to indemnify the initial purchasers against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the initial purchasers may be required to make in respect of those liabilities.

Commissions and Discounts

The representatives have advised us that the respective initial purchasers propose initially to offer the notes at the respective offering price set forth on the cover page of this offering circular. After the initial offering, the offering price or any other term of the offering may be changed. The initial purchasers may offer and sell notes through certain of their affiliates.

Notes Are Not Being Registered

The notes have not been registered under the Securities Act or any state securities laws. The initial purchasers propose to offer the notes for resale in transactions not requiring registration under the Securities Act or applicable state securities laws, including sales pursuant to Rule 144A and Regulation S. The initial purchasers will not offer or sell the notes except to persons they reasonably believe to be qualified institutional buyers or pursuant to offers and sales to non-U.S. persons that occur outside of the United States within the meaning of Regulation S. In addition, until 40 days following the commencement of this offering, an offer or sale of notes within the United States by a dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act unless the dealer makes the offer or sale in compliance with Rule 144A or another exemption from registration under the Securities Act. Each purchaser of the notes will be deemed to have made acknowledgments, representations and agreements as described under "Transfer Restrictions."

Settlement

The Issuer expects that delivery of the notes will be made against payment therefor on or about , 2020, which is the business day following the date hereof (such settlement cycle being referred to as "T+ ").

Under Rule 15c6-1 under the Exchange Act, trades in the secondary market generally are required to settle in two business days unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the notes on any date prior to the second business day before delivery will be required, by virtue of the fact that the notes initially will settle in T+ , to specify an alternative settlement cycle at the time of any such trade to prevent failed settlement. Purchasers of the notes who wish to trade the notes on any date prior to the second business day before delivery should consult their own advisors.

No Sales of Similar Securities

The Issuer and the guarantors have agreed, such to certain exceptions, that for a period of 45 days after the date of this offering circular, neither it nor any of the guarantors will, without the prior written consent of Goldman Sachs & Co. LLC and Citigroup Global Markets Limited, offer, sell, contract to sell or otherwise dispose of, or file with the Commission a registration statement under the Securities Act in respect of, any securities that are substantially similar to the notes.

New Issue of Notes

The notes are a new issue of securities with no established trading market. We intend to apply to list the notes to be admitted to trading on the Official List of the Exchange in a reasonable period following the issue date of the notes. The Exchange is not a regulated market for the purposes of MiFID II. The listing application for the notes will be subject to approval by the Authority. There is no assurance that the application will be successful or that the notes will be listed and admitted to trading on the Exchange. Consummation of the offering of the notes is not contingent on the Issuer making an application or obtaining such listing or admission to trading.

We have been advised by certain of the initial purchasers that they presently intend to make a market in the notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. We cannot assure the liquidity of the trading market for the notes. If an active trading market for the notes does not develop, the market price and liquidity of the notes may be adversely affected. If the notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, our operating performance and financial condition, general economic conditions and other factors.

Short Positions

In connection with the offering, the initial purchasers may purchase and sell the notes in the open market. These transactions may include short sales and purchases on the open market to cover positions created by short sales. Short sales involve the sale by the initial purchasers of a greater principal amount of notes than they are required to purchase in the offering. The initial purchasers must close out any short position by purchasing notes in the open market. A short position is more likely to be created if the initial purchasers are concerned that there may be downward pressure on the price of the notes in the open market after pricing that could adversely affect investors who purchase in the offering.

Similar to other purchase transactions, the initial purchasers' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of the notes or preventing or retarding a decline in the market price of the notes. As a result, the price of the notes may be higher than the price that might otherwise exist in the open market.

Neither we nor any of the initial purchasers make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the notes. In addition, neither we nor any of the initial purchasers make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Other Relationships

The initial purchasers and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the initial purchasers and their respective affiliates have provided, and may in the future provide, a variety of these services to the Issuer and to persons and entities with relationships with the Issuer, for which they received or will receive customary fees and expenses. For example, certain of the initial purchasers acted as underwriters in connection with our initial public offering and secondary equity offering and as initial purchasers in the offerings of the Existing Notes. An affiliate of Goldman Sachs & Co. LLC was engaged as a financial advisor in connection with the VWR Acquisition and acts as a joint lead arranger, joint bookrunner and administrative agent in connection with our Senior Secured Credit Facilities. In addition, certain of the initial purchasers or their respective affiliates are agents and lenders under the Senior Secured Credit Facilities and/or the A/R Facility and have agreed to act as arrangers and bookrunners of our New Term Loan Facility.

In addition, in the ordinary course of their business activities, the initial purchasers and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The initial purchasers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Certain affiliates of Goldman Sachs & Co. LLC currently own 43,481,933 shares of the Company's common stock and one of its employees is a member of the board of the Company. Affiliates of Goldman Sachs & Co. LLC also have certain other rights.

Certain of the initial purchasers or their affiliates that have a lending relationship with us routinely hedge, and certain other of those initial purchasers or their affiliates may hedge, their credit exposure to us consistent with their customary risk management policies. Typically, such initial purchasers and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities, including potentially the notes offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the notes offered hereby. The initial purchasers and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such assets, securities or financial instruments and may, at any time, hold, or recommend to clients that they acquire, long and/or short positions in such assets, securities and instruments. Certain of the initial purchasers and/or their affiliates may be holders of the Existing Unsecured Notes, which we intend to redeem in full with the proceeds of this offering. Accordingly, such initial purchasers and/or their affiliates may receive a portion of the proceeds from this offering of the notes in their capacities as holders of the Existing Unsecured Notes.

Selling Restrictions

European Economic Area and the United Kingdom

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA") or the United Kingdom (the "UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended, the "Prospectus Regulation"). Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA or in the UK has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA or in the UK may be unlawful under the PRIIPs Regulation. This offering circular has been prepared on the basis that any offer of notes in any Member State of the EEA or in the UK will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of notes. This offering circular is not a prospectus for the purposes of

the Prospectus Regulation.

References to Regulations or Directives include, in relation to the UK, those Regulations or Directives as they form part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 or have been implemented in UK domestic law, as appropriate.

MiFID II Product Governance / Professional Investors and ECPs Only Target Market—Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the notes has led to the conclusion that: (i) the target market for the notes is eligible counterparties and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of the notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the notes (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

The above selling restriction is in addition to any other selling restrictions set out below.

Additional Notice to Prospective Investors in the United Kingdom

In the UK, this offering circular is being distributed only to and is directed only at non-retail investors (being persons who are not retail investors as defined above) who are also: (i) persons who have professional experience in matters relating to investments and are investment professionals as defined within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (which we refer to as the "Order") or (ii) high net worth bodies corporate and any other person falling within Article 49(2)(a) to (d) of the Order or (iii) persons to whom it would otherwise be lawful to distribute it (all such persons together being referred to as "relevant persons").

In the UK, this offering circular must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this offering circular relates is available only in the UK to relevant persons and will be engaged in only with relevant persons. Recipients of this offering circular are not permitted to transmit it to any other person. The notes are not being offered to the public in the UK. Any person in the UK who is not a relevant person should not act or rely on this offering circular or any of its contents.

Each initial purchaser has represented and agreed that: (i) it has only communicated or caused to be communicated, and will only communicate or cause to be communicated, an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (as amended, the "FSMA")) received by it in connection with the issuance or sale of any notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer or guarantors; and (ii) it has complied, and will comply, with all applicable provisions of the FSMA with respect to anything done by it in relation to such notes in, from or otherwise involving the United Kingdom.

Notice to Prospective Investors in Hong Kong

The notes may not be offered or sold in Hong Kong by means of any document except for notes which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) (the "SFO") other than (i) to "professional investors" as defined in the SFO and any rules made thereunder; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32, Laws of Hong Kong) (the "CO") or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the notes may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

Notice to Prospective Investors in Singapore

This offering circular has not been registered as an offering circular with the Monetary Authority of Singapore. Accordingly, this offering circular and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the notes may not be circulated or distributed, nor may the notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the notes are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; (3) by operation of law; (4) as specified in Section 276(7) of the SFA; or (5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulation 2018 of Singapore.

Singapore Securities and Futures Act Product Classification—Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the SFA, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A of the SFA) that the notes are "prescribed capital markets products" (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products). Any reference to any term as defined in the SFA, or any provision in the SFA is a reference to that term as modified or amended from time to time including by such of its subsidiary legislation as may be applicable at the relevant time.

Notice to Prospective Investors in Japan

The notes have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended, the "Financial Instruments and Exchange Law"). The notes have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to Prospective Investors in Canada

The notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering circular (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable

provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts ("NI 33-105"), the initial purchasers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Switzerland

This document is not intended to constitute an offer or solicitation to purchase or invest in the notes. The notes may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act ("FinSA") and no application has or will be made to admit the notes to trading on any trading venue (exchange or multilateral trading facility) in Switzerland. Neither this document nor any other offering or marketing material relating to the notes constitutes a prospectus pursuant to the FinSA, and neither this document nor any other offering or marketing material relating to the notes may be publicly distributed or otherwise made publicly available in Switzerland.

LEGAL MATTERS

The validity of the notes offered hereby and certain other legal matters will be passed upon for us by Simpson Thacher & Bartlett LLP, New York, New York. Certain legal matters in connection with this offering will be passed on for the initial purchasers by Cahill Gordon & Reindel LLP, New York, New York.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The consolidated financial statements of Avantor, Inc. and subsidiaries as of December 31, 2019 and 2018, and for each of the three years in the period ended December 31, 2019, incorporated in this offering circular by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2019, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference (which report expresses an unqualified opinion on the consolidated financial statements and includes an explanatory paragraph referring to a change in accounting principle).

WHERE YOU CAN FIND MORE INFORMATION AND INCORPORATION BY REFERENCE

We file periodic reports and other information with the SEC. In this offering circular, we "incorporate by reference" certain information we file with the SEC, which means that important information is being disclosed to you by referring to those documents. Those documents that we incorporate by reference that are filed prior to the date of this offering circular are considered part of this offering circular, and those documents that are filed after the date of this offering circular and prior to the sale of the notes to you pursuant to this offering circular will be considered a part of this offering circular from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated herein by reference, or contained in this offering circular, shall be deemed to be modified or superseded for purposes of this offering circular to the extent that a statement contained herein or in any other subsequently dated or filed document which also is, or is deemed to be, incorporated by reference herein modifies or supersedes such statement. The documents listed below are incorporated by reference in this offering circular:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed on February 14, 2020 (including information specifically incorporated by reference into such Annual Report on Form 10-K from our Proxy Statement for our 2020 Annual Meeting of Stockholders filed on April 8, 2020);

- our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2020, filed on April 29, 2020, the quarter ended June 30, 2020, filed on July 29, 2020, and the quarter ended September 30, 2020, filed on October 27, 2020; and

- our Current Reports on Form 8-K filed on January 27, 2020, March 30, 2020, April 22, 2020, May 8, 2020, May 26, 2020, July 7, 2020, July 10, 2020, July 14, 2020, July 17, 2020 and August 21, 2020.

We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed above or filed in the future, that are not deemed "filed" with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or certain exhibits furnished pursuant to Item 9.01 of Form 8-K.

Our filings with the SEC, including the filings that are incorporated by reference to this offering circular, are available to the public on the SEC's website at *http://www.sec.gov*. Those filings will also be available to the public on, or accessible through, our corporate website at *www.avantorsciences.com*. The information we file with the SEC or contained on or accessible through our corporate website or any other website that we may maintain is not part of this offering circular.

We have not, and the initial purchasers have not, authorized anyone to provide you with information other than that provided in this offering circular. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. You should not assume that the information in this offering circular is accurate as of any date other than the date of this offering circular.

Avantor Funding, Inc.

€550,000,000 % Senior First Lien Notes due 2025

Offering Circular

, 2020

Joint Active Book-Running Managers

Goldman Sachs & Co. LLC
Citigroup

Joint Book-Running Managers

Barclays
J.P. Morgan
BofA Securities

Co-Managers

PNC Capital Markets LLC
HSBC
Jefferies