Table of Contents

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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended June 30, 2022
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from_____to _____
Commission File Number: 001-36410

Phibro Animal Health Corporation
(Exact name of registrant as specified in its charter)

Delaware	**13-1840497**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
Glenpointe Centre East, 3rd Floor **300 Frank W. Burr Boulevard, Suite 21** **Teaneck, New Jersey** (Address of Principal Executive Offices)	**07666-6712** (Zip Code)

(201) 329-7300
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, $0.0001 par value per share	PAHC	Nasdaq Stock Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files.) Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financing reporting under Section 404(b) of the Sarbanes Oxley Act (15 U.S.C 7262(b)) by the registered public accounting firm that prepared or issued its audit report Yes ☒ No ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the registrant's Class A common stock and Class B common stock held by non-affiliates of the registrant was $414,078,679 as of December 31, 2021, the last business day of the registrant's most recently completed second fiscal quarter based on the closing price of the common stock on the Nasdaq Stock Market. The registrant has no non-voting common stock.

As of August 19, 2022, there were 20,337,574 shares of the registrant's Class A common stock, par value $0.0001 per share, and 20,166,034 shares of the registrant's Class B common stock, par value $0.0001 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the registrant's Proxy Statement for the 2022 Annual Meeting of Shareholders to be held on November 7, 2022 (hereinafter referred to as the "2022 Proxy Statement") are incorporated herein by reference in Part III of this Annual Report on Form 10-K. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended June 30, 2022.

PHIBRO ANIMAL HEALTH CORPORATION

TABLE OF CONTENTS

Forward-Looking Statements and Risk Factors Summary

This Annual Report on Form 10-K contains forward-looking statements that are subject to risks and uncertainties. All statements other than statements of historical or current fact included in this report are forward-looking statements. Forward-looking statements discuss our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "aim," "anticipate," "believe," "estimate," "expect," "forecast," "outlook," "potential," "project," "projection," "plan," "intend," "seek," "may," "could," "would," "will," "should," "can," "can have," "likely," the negatives thereof and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events. For example, all statements we make relating to our estimated and projected earnings, revenues, costs, expenditures, cash flows, growth rates and financial results, our plans and objectives for future operations, growth or initiatives, strategies, or the expected outcome or impact of pending or threatened litigation are forward-looking statements. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected. Examples of such risks and uncertainties include:

- the negative effects of a pandemic, epidemic, or outbreak of an infectious disease in humans, such as COVID-19, on our business, financial results, manufacturing facilities and supply chain, as well as our customers, protein processors and markets;
- perceived adverse effects on human health linked to the consumption of food derived from animals that utilize our products could cause a decline in the sales of those products;
- restrictions on the use of antibacterials in food-producing animals may become more prevalent;
- the potential Food and Drug Administration ("FDA") withdrawal of approval of our Mecadox® (carbadox) product;
- a material portion of our sales and gross profits are generated by antibacterials and other related products;
- competition in each of our markets from a number of large and small companies, some of which have greater financial, research and development ("R&D"), production and other resources than we have;
- outbreaks of animal diseases could significantly reduce demand for our products;
- our business may be negatively affected by weather conditions and the availability of natural resources;
- climate change could have a material adverse impact on our operations and our customers' businesses;
- actions of regulatory bodies, including obtaining approvals related to the testing, manufacturing and marketing of certain of our products;
- the continuing trend toward consolidation of certain customer groups as well as the emergence of large buying groups;
- our ability to control costs and expenses;
- any unforeseen material loss or casualty;
- misuse or extra-label use of our products;
- exposure relating to rising costs and reduced customer income;
- heightened competition, including those from generics and those deriving from advances in veterinary medical practices and animal health technologies;
- unanticipated safety or efficacy concerns;
- our dependence on suppliers having current regulatory approvals;
- our raw materials are subject to price fluctuations and their availability can be limited;

- natural and man-made disasters, including but not limited to fire, snow and ice storms, flood, hail, hurricanes and earthquakes;
- business interruption from political and social instability, including crime, civil disturbance, terrorist activities, outbreaks of disease and pandemics and armed conflicts, such as the current armed conflict between Russia and Ukraine;
- terrorist attacks, particularly attacks on or within markets in which we operate;
- risks related to changes in tax rates and exposure;
- our ability to successfully implement our strategic initiatives;
- our reliance on the continued operation of our manufacturing facilities and application of our intellectual property;
- adverse U.S. and international economic market conditions, including currency fluctuations;
- failure of our product approval, R&D, acquisition and licensing efforts to generate new products;
- the risks of product liability claims, legal proceedings and general litigation expenses;
- the impact of current and future laws and regulatory changes, including risks related to the protection of our customers' privacy and risks related to environmental, health and safety laws and regulations;
- modification of foreign trade policy may harm our food animal product customers;
- our dependence on our Israeli and Brazilian operations;
- impact of increased or decreased inventory levels at our direct customers or channel distributors;
- our substantial level of indebtedness and related debt-service obligations;
- restrictions imposed by covenants in our debt agreements;
- the risk of work stoppages; and
- other factors as described in "Risk Factors" in Item 1A. of this Annual Report on Form 10-K.

While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Important factors that could cause actual results to differ materially from our expectations, or cautionary statements, are disclosed under "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." All forward-looking statements are expressly qualified in their entirety by these cautionary statements. You should evaluate all forward-looking statements made in this report in the context of these risks and uncertainties.

We caution you that the important factors referenced above may not contain all of the factors that are important to you. In addition, we cannot assure you that we will realize the results or developments we expect or anticipate or, even if substantially realized, that they will result in the consequences we anticipate or affect us or our operations in the way we expect. The forward-looking statements included in this report are made only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law. If we do update one or more forward-looking statements, no inference should be made that we will make additional updates with respect to those or other forward-looking statements.

Market, Ranking and Other Industry Data

Unless otherwise indicated, information contained in this report concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, is based on management estimates. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. We believe these estimates are reasonable as of the date of this report, or if an earlier date is specified, as of such earlier date. However, this information may prove to be inaccurate because of the method by which we obtained some of the data for

our estimates or because this information is subject to change and cannot always be verified due to limits on the availability and reliability of independent sources, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey of market shares. In addition, purchasing patterns and consumer preferences can and do change. As a result, you should be aware that market share, ranking and other similar data set forth in this report, and estimates and beliefs based on such data, may not be reliable.

Trademarks, Service Marks and Trade Names

The following trademarks and service marks used throughout this report belong to, are licensed to, or are otherwise used by us in our business: AB20®; Animate®; Aviax®; Aviax Plus®; Avi-Carb®; Banminth®; Bloat Guard®; Cellerate Yeast Solutions®; Carbigen®, Cerdimix®; Cerditac®; Coxistac®; EASE®; Emulsigen®; Eskalin®; Gemstone®; Lactrol®; Magni-Phi®; MB-1®; Mecadox®; MicroLife®; MJPRRS®; MVP adjuvants®; Neo-Terramycin®; Nicarb®; Nicarmix®; OmniGen®; pHi-Tech®; Phivax®; Polygen®; Posistac®; Provia Prime™; Rejensa®; Rumatel®; Salmin Plus®; Stafac®; TAbic®; Tailor-Made®; Terramycin®; V.H.™; V-Max®; and Vistore®.

PART I

Item 1. Business

Overview

Phibro Animal Health Corporation is a leading global diversified animal health and mineral nutrition company. We strive to be a trusted partner with livestock producers, farmers, veterinarians and consumers who raise and care for farm and companion animals by providing solutions to help them maintain and enhance the health of their animals. We sell approximately 780 product lines in over 80 countries to approximately 3,790 customers. We develop, manufacture and market a broad range of products for food and companion animals including poultry, swine, beef and dairy cattle, aquaculture and dogs. Our products help prevent, control and treat diseases and support nutrition to help improve animal health and well-being. We sell animal health and mineral nutrition products either directly to integrated poultry, swine and cattle producers or through animal feed manufacturers, wholesalers, distributors and veterinarians.

Our products include:

- Animal health products such as antibacterials, anticoccidials, nutritional specialty products and vaccines that help improve the animal's health and therefore improve performance, food safety and animal welfare. Our Animal Health segment also includes antibacterials and other processing aids used in the ethanol fermentation industry.
- Mineral nutrition products that fortify the animal's diet and help maintain optimal health.

We have focused our efforts in regions where the majority of livestock production is consolidated in large commercial farms. We believe we are well positioned to grow our sales with our established network of sales, marketing and distribution professionals in markets in North America, Latin America, Asia Pacific, Europe and Africa.

We are investing resources to develop future products for the companion animal sector. Our business is currently concentrated in the livestock sector.

In addition to animal health and mineral nutrition products, we manufacture and market specific ingredients for use in the personal care, industrial chemical and chemical catalyst industries. We sell performance products directly to customers in the aforementioned industries.

Our Class A common stock trades on the Nasdaq Stock Market ("Nasdaq") under the trading symbol "PAHC." Our Class B common stock is not listed or traded on any stock exchange. We are a Delaware corporation.

Unless otherwise indicated or the context requires otherwise, references in this report to "we," "our," "us," "the Company," "Phibro," "PAHC" and similar expressions refer to Phibro Animal Health Corporation and its subsidiaries.

For discussion regarding the impact of COVID-19 and the armed conflict between Russia and Ukraine on our financial results, see Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Business Segments

We manage our business in three segments — Animal Health, Mineral Nutrition, and Performance Products — each with its own dedicated management and sales team, for enhanced focus and accountability. Net sales by segments, species and regions were:

	Segments			Change				Percentage of total		
For the Year Ended June 30	2022	2021	2020	2022 / 2021		2021 / 2020		2022	2021	2020
				($ in millions)						
Animal Health	$ 607	$ 546	$ 527	$ 61	*11 %*	$ 19	*4 %*	*64 %*	*65 %*	*66 %*
Mineral Nutrition	260	221	214	39	*18 %*	6	*3 %*	*28 %*	*26 %*	*27 %*
Performance Products	76	67	59	9	*13 %*	8	*14 %*	*8 %*	*8 %*	*7 %*
Total	$ 942	$ 833	$ 800	$ 109	*13 %*	$ 33	*4 %*			

For the Year Ended June 30	Species 2022	2021	2020	Change 2022 / 2021		2021 / 2020		Percentage of total 2022	2021	2020
				($ in millions)						
Poultry	$ 319	$ 297	$ 301	$ 22	*7 %*	$ (4)	*(1)%*	*34 %*	*36 %*	*38 %*
Dairy	186	169	163	17	*10 %*	6	*4 %*	*20 %*	*20 %*	*20 %*
Cattle	127	106	94	21	*20 %*	12	*13 %*	*13 %*	*13 %*	*12 %*
Swine	80	79	81	1	*1 %*	(2)	*(2)%*	*8 %*	*9 %*	*10 %*
Other [1]	230	182	161	48	*26 %*	21	*13 %*	*24 %*	*22 %*	*20 %*
Total	$ 942	$ 833	$ 800	$ 109	*13 %*	$ 33	*4 %*			

For the Year Ended June 30	Regions [2] 2022	2021	2020	Change 2022 / 2021		2021 / 2020		Percentage of total 2022	2021	2020
				($ in millions)						
United States	$ 562	$ 495	$ 472	$ 67	*13 %*	$ 23	*5 %*	*60 %*	*59 %*	*59 %*
Latin America and Canada	191	166	159	25	*15 %*	7	*4 %*	*20 %*	*20 %*	*20 %*
Europe, Middle East and Africa	122	114	112	8	*7 %*	2	*2 %*	*13 %*	*14 %*	*14 %*
Asia Pacific	67	58	57	9	*15 %*	1	*2 %*	*7 %*	*7 %*	*7 %*
Total	$ 942	$ 833	$ 800	$ 109	*13 %*	$ 33	*4 %*			

(1) Other includes sales related to: Performance Products customers; the ethanol industry; aquaculture and other animal species; adjuvants for animal vaccine manufacturers; and Mineral Nutrition other customers.

(2) Net sales by region are based on country of destination.

Certain amounts and percentages may reflect rounding adjustments.

Adjusted EBITDA by segment was:

For the Year Ended June 30	Adjusted EBITDA[1] 2022	2021	2020	Change 2022 / 2021		2021 / 2020		Percentage of total[2] 2022	2021	2020
				($ in millions)						
Animal Health	$ 124	$ 124	$ 123	$ 0	*0 %*	$ 1	*1 %*	*79 %*	*82 %*	*87 %*
Mineral Nutrition	24	17	15	7	*40 %*	2	*17 %*	*15 %*	*11 %*	*10 %*
Performance Products	9	9	5	(1)	*(8)%*	5	*108 %*	*6 %*	*6 %*	*3 %*
Corporate	(46)	(43)	(40)	(3)	*7 %*	(2)	*6 %*			
Total	$ 111	$ 108	$ 102	$ 3	*3 %*	$ 6	*6 %*			

(1) See “Management’s Discussion and Analysis of Financial Condition and Results of Operations General description of non-GAAP financial measures” for description of Adjusted EBITDA.

(2) Before unallocated corporate costs.

Certain amounts and percentages may reflect rounding adjustments.

Net identifiable assets by segment were:

As of June 30	Net Identifiable Assets 2022	2021	2020	Change 2022 / 2021		2021 / 2020		Percentage of total 2022	2021	2020
				($ in millions)						
Animal Health	$ 655	$ 595	$ 561	$ 60	*10 %*	$ 34	*6 %*	*70 %*	*71 %*	*71 %*
Mineral Nutrition	87	68	66	19	*29 %*	2	*3 %*	*9 %*	*8 %*	*8 %*
Performance Products	39	37	31	3	*7 %*	6	*19 %*	*4 %*	*4 %*	*4 %*
Corporate	150	141	127	9	*6 %*	14	*11 %*	*16 %*	*17 %*	*16 %*
Total	$ 932	$ 841	$ 784	$ 91	*11 %*	$ 57	*7 %*			

Corporate assets include cash and cash equivalents, short-term investments, debt issuance costs, income tax related assets and certain other assets.

Certain amounts and percentages may reflect rounding adjustments.

Animal Health

Our Animal Health business develops, manufactures and markets about 300 product lines, including:

- antibacterials, which inhibit the growth of pathogenic bacteria that cause infections in animals; anticoccidials, which inhibit the growth of coccidia (parasites) that damage the intestinal tract of animals; and related products (MFAs and other);
- nutritional specialty products, which support nutrition to help improve health and performance (nutritional specialties); and
- vaccines, which induce an increase in antibody levels against a specific virus or bacterium, thus preventing disease due to infection with wild strains of that virus or bacterium.

Our animal health products help our customers prevent, control and treat diseases and support nutrition to help improve health and well-being, enabling our customers to more efficiently produce high-quality, wholesome and affordable animal protein products for human consumption. We develop, manufacture and market a broad range of animal health products for food animals including poultry, swine, beef and dairy cattle and aquaculture. We provide technical and product support directly to our customers to ensure the optimal use of our products. The animal health industry and demand for many of our animal health products in a particular region are affected by changing disease pressures and by weather conditions, as usage of our products follows varying weather patterns and seasons. As a result, we may experience regional and seasonal fluctuations in our animal health segment.

We continue to build our companion animal business and pipeline. Our Rejensa® joint supplement for dogs continues to gain customer acceptance. Our companion animal development pipeline includes an early-stage atopic dermatitis compound, a novel Lyme vaccine delivery system product, two early-stage oral care compounds, and we have entered into an agreement with Rejuvenate Bio, Inc. to collaborate on the development and commercialization of a gene therapy for Mitral Valve Disease (MVD) in canines (dogs).

Animal Health net sales by product group and regions were:

For the Years Ended June 30	Product Groups			Change				Percentage of total		
	2022	2021	2020	2022 / 2021		2021 / 2020		2022	2021	2020
				($ in millions)						
MFAs and other	$ 362	$ 330	$ 322	$ 32	*10 %*	$ 8	*2 %*	*60 %*	*60 %*	*61 %*
Nutritional specialties	157	143	129	14	*10 %*	13	*10 %*	*26 %*	*26 %*	*25 %*
Vaccines	88	73	75	15	*21 %*	(2)	*(3)%*	*15 %*	*13 %*	*14 %*
Animal Health	$ 607	$ 546	$ 527	$ 61	*11 %*	$ 19	*4 %*			

For the Years Ended June 30	Regions[1]			Change				Percentage of total		
	2022	2021	2020	2022 / 2021		2021 / 2020		2022	2021	2020
				($ in millions)						
United States	$ 248	$ 227	$ 214	$ 21	*9 %*	$ 13	*6 %*	*41 %*	*42 %*	*41 %*
Latin America and Canada	175	151	148	24	*16 %*	3	*2 %*	*29 %*	*28 %*	*28 %*
Europe, Middle East and Africa	120	110	109	10	*9 %*	1	*1 %*	*20 %*	*20 %*	*21 %*
Asia Pacific	64	58	56	6	*10 %*	2	*4 %*	*11 %*	*11 %*	*11 %*
Total	$ 607	$ 546	$ 527	$ 61	*11 %*	$ 19	*4 %*			

(1) Net sales by region are based on country of destination.

Certain amounts and percentages may reflect rounding adjustments.

MFAs and Other

Our MFAs and other products primarily consist of concentrated medicated products administered through animal feeds, commonly referred to as Medicated Feed Additives ("MFAs"). Our MFAs and other products primarily consist of the production and sale of antibacterials (including Stafac®, Terramycin®, Neo-Terramycin® and Mecadox®) and anticoccidials (including Nicarb®, Aviax®, Aviax Plus®, Coxistac™ and amprolium). Antibacterials inhibit the growth of pathogenic bacteria that cause infections in animals, while anticoccidials inhibit growth of coccidia (parasites) that damage the intestinal tract of animals. The "MFAs and other products" product group also includes antibacterial products and other processing aids, used in the ethanol fermentation industry.

Approximately 47% of our MFAs and other sales in fiscal year 2022 were to the poultry industry, with sales to swine, cattle, dairy and other customers accounting for the remainder. We market our MFAs and other products in all regions where we do business.

Nutritional Specialties

Nutritional specialty products enhance nutrition to help improve health and performance in areas such as immune system function and digestive health. Many of our proprietary nutritional specialty products have been developed through applied research in cooperation with private research companies or by leading universities with whom we collaborate and then further develop through commercial trials with customers. Our nutritional specialty products include the OmniGen® family of products, patented nutritional specialty products that have been shown in several studies to help maintain a cow's healthy immune system; Animate®, an anionic nutritional specialty product that helps optimize the health and performance of the transition dairy cow; Magni-Phi®, a proprietary nutritional specialty product that has been shown to help improve intestinal health and immune response in poultry; Provia Prime™/MicroLife® Prime, a four-strain direct-fed microbial product for optimization of gut health, which leads to better pathogen control and improved performance in poultry; and, Cellerate Yeast Solutions®, a line of proprietary yeast culture products that are used to help improve digestive health, which may lead to improved animal health and performance.

We are also a developer, manufacturer and marketer of microbial products and bioproducts for a variety of applications serving animal health and nutrition, environmental, industrial and agricultural customers. We market our nutritional specialty products in all regions in which we operate.

Vaccines

Our vaccine products are primarily focused on preventing diseases in poultry, swine, cattle and aquaculture. We market our vaccine products in all regions in which we operate. We market our vaccine products to protect animals from either viral or bacterial disease challenges.

We have developed and market over 320 licensed vaccine presentations for prevention of diseases in poultry, including vaccines to protect against Infectious Bursal Disease, Infectious Bronchitis, Newcastle Disease, Reovirus, Salmonella and Coryza.

We develop, manufacture and market autogenous vaccines against animal diseases for swine, poultry and cattle in the United States. Our autogenous bacterial and viral vaccines enable us to produce custom vaccines for veterinarians that contain antigens specific to each farm, allowing Phibro to provide comprehensive and customized health management solutions to our customers. Our autogenous vaccine products include the Tailor-Made® line of vaccines and the MJPRRS® vaccine. We also develop, manufacture and market adjuvants to animal vaccine manufacturers globally.

We have developed TAbic®, an innovative and proprietary delivery platform for vaccines. TAbic is a patented technology for formulation and delivery of vaccine antigens in effervescent tablets, packaged in sealed aluminum blister packages. The technology replaces the glass bottles that are in common use today, and offers significant sustainability advantages including reduced storage requirements, customer handling and disposal. Several of our vaccine products are available in the patented TAbic format.

We also focus on innovation to produce new antigens or new presentations of antigens, and have developed new vaccines and related technologies, such as:

- MB-1®, a live attenuated vaccine for Infectious Bursal disease, developed from the M.B. strain, adapted for in-ovo or subcutaneous injection at the hatchery,

- TAbic® IBVAR206, a live attenuated virus vaccine for Infectious Bronchitis developed from a unique genotype 2 variant strain,
- The inactivated subunit Infectious Bursal Disease Virus,
- Salmin Plus®, the first multi-variant inactivated vaccine containing Salmonella Enteritis, Salmonella Typhimurium and Salmonella Infantis,
- EASE® (Enhanced Antigen Surface Expression), a new bacterial growth procedure to improve the performance of our vaccines, and
- pHi-Tech®, a portable electronic vaccination device and software that ensures proper delivery of vaccines and provides health management information.

We continue to invest in a vaccine production facility in Sligo, Ireland to manufacture poultry vaccines, with our first commercial sale of product from this facility having occurred in February 2022, and longer-term expectations to add swine and cattle vaccines production at this facility. Installation of additional machinery and equipment is planned while we continue to submit necessary registrations on a country-by-country basis in order to obtain regulatory approvals needed to sell these products to a broader geographic market.

We are building a vaccine production facility in Guarulhos, Brazil to manufacture and market autogenous vaccines against animal diseases for swine, poultry and aquaculture.

Mineral Nutrition

Our Mineral Nutrition business manufactures and markets approximately 400 formulations and concentrations of trace minerals such as zinc, manganese, copper, iron and other compounds, with a focus on customers in North America. Our customers use these products to fortify the daily feed requirements of their animals' diets and maintain an optimal balance of trace elements in each animal. We manufacture and market a broad range of mineral nutrition products for food animals including poultry, swine and beef and dairy cattle. Volume growth in the mineral nutrition sector is primarily driven by livestock production levels, while pricing is largely based on costs of the underlying commodity metals. Demand for our mineral nutrition products can vary in different seasons of the year and due to changes in weather conditions in a particular region, both of which may cause animal feed consumption to fluctuate. As a result, we may experience regional and seasonal fluctuations in our Mineral Nutrition segment.

Performance Products

Our Performance Products business manufactures and markets specialty ingredients for use in the personal care, industrial chemical and chemical catalyst industries, predominantly in the United States.

Our Products

Animal Health

MFAs and Other

Our MFAs and other products primarily consist of the production and sale of antibacterials (Stafac, Terramycin, Neo-Terramycin and Mecadox) and anticoccidials (Nicarb, Aviax, Aviax Plus, Coxistac and amprolium). We sell our MFAs and other products in all regions where we do business.

Antibacterials and Anticoccidials

We manufacture and market a broad range of antibacterials and other medicated products to the global livestock industry. These products provide therapeutic benefits for the animals while helping to control pathogens that have a negative impact on animal health and productivity. The table below presents our core MFA products:

Product	Active Ingredient	Market Entry of Active Ingredient	Description
Terramycin®	oxytetracycline	1951	Antibacterial with multiple applications for a wide number of species
Nicarb®	nicarbazin	1954	Anticoccidial for poultry
Amprolium	amprolium	1960	Anticoccidial for poultry and cattle
Bloat Guard®	poloxalene	1967	Anti-bloat treatment for cattle
Banminth®	pyrantel tartrate	1972	Anthelmintic for livestock
Mecadox®	carbadox	1972	Antibacterial for enteric pathogens in swine including Salmonellosis and dysentery
Stafac®/Eskalin®/V-Max®	virginiamycin	1975	Antibacterial used to prevent and control diseases in poultry, swine and cattle
Coxistac® /Posistac®	salinomycin	1979	Anticoccidial for poultry, cattle and swine
Rumatel®	morantel tartrate	1981	Anthelmintic for livestock
Cerditac®/Cerdimix®	oxibendazole	1982	Anthelmintic for livestock
Aviax®	semduramicin	1995	Anticoccidial for poultry
Neo-Terramycin®	oxytetracycline + neomycin	1999	Combination of two antibacterials with multiple applications for a wide number of species
Aviax Plus®/Avi-Carb®	semduramicin + nicarbazin	2010	Anticoccidial for poultry

Antibacterials are biological or chemical products used in the animal health industry to treat or to prevent bacterial diseases, thereby promoting animal health, resulting in more efficient livestock production. Several factors contribute to limit the efficiency, weight gain and feed conversions of livestock production, including stress, poor nutrition, environmental and management challenges and disease. Antibacterials help prevent, control and treat disease in livestock, which can also lead to improved overall health of the animals, improved rate of weight gain and more efficient feed conversion. Our antibacterial products include:

- *Oxytetracycline and Neomycin*. Terramycin® utilizes the active ingredient oxytetracycline and Neo-Terramycin® combines the active ingredients neomycin and oxytetracycline to prevent, control and treat a wide range of diseases in chickens, turkeys, cattle, swine and aquaculture. We sell Terramycin and Neo-Terramycin products primarily to livestock and aquaculture producers, feed companies and distributors.
- *Virginiamycin*. Virginiamycin is an antibacterial marketed under the brand names Stafac® to poultry, swine and cattle producers, Eskalin® to dairy cows and beef cattle producers and V-Max® for beef cattle producers. Virginiamycin is used primarily to prevent necrotic enteritis in chickens, treat and control Swine Dysentery and aid in the prevention or reduce the incidence of rumen acidosis and liver abscesses in cattle. Our experience in the development and production of virginiamycin has enabled us to develop significant intellectual property through trade secret know-how, which has helped protect against competition from generics. We are the sole worldwide manufacturer and marketer of virginiamycin.

- *Carbadox*. We market carbadox under the brand name Mecadox® for use in swine feeds to control swine Salmonellosis and Swine Dysentery and, as a result, improve animal health and production efficiencies. Mecadox is sold primarily in the United States to feed companies and large integrated swine producers.
- Anticoccidials are produced through fermentation or chemical synthesis and are primarily used to prevent and control the disease coccidiosis in poultry and cattle, thereby promoting intestinal health, resulting in healthier animals. Coccidiosis is a disease of the digestive tract that has considerable health consequences to livestock and, as a result, is of great concern to livestock producers. We sell our anticoccidials primarily to integrated poultry producers and feed companies and to international animal health companies. Our anticoccidial products include:
- *Nicarbazin*. We produce and market nicarbazin, a broad-spectrum anticoccidial used for coccidiosis prevention in poultry. We market nicarbazin under the trademarks Nicarb® and Nicarmix® and as an active pharmaceutical ingredient.
- *Amprolium*. We produce and market amprolium primarily as an active pharmaceutical ingredient.
- *Salinomycin and Semduramicin*. We produce and market Coxistac®, Aviax®/Aviax Plus®/Avi-Carb® and Posistac®, which are in a class of compounds known as ionophores, to combat coccidiosis in poultry and increase feed efficiency in swine.

Anthelmintics are used to treat infestations of parasitic intestinal worms. Our anthelmintic products include Rumatel® and Banminth®, which are both marketed to control major internal nematode parasites in beef and dairy cattle and swine.

Bloat Guard® is an anti-bloat treatment used in cattle to control bloat in animals grazing on legume or wheat-pasture.

Other includes products used in the ethanol fermentation industry, including antimicrobials, yeasts, process cleaning, corn oil recovery and other processing aids.

Nutritional Specialties

Our primary nutritional specialty products have been identified, developed and commercialized by our staff of nutritionists and veterinarians working with private research companies, leading universities and customers with whom we collaborate. For those of our nutritional specialty products that are not proprietary or exclusive to us, we typically maintain unique supply agreements or exclusive distributor status with the product developers giving us preferential access to trademarks, territories and research data.

Our nutritional specialty products include:

Product	Market Entry	Description
AB20®	1989	Natural flow agent that improves overall feed quality
Animate®	1999	Maintains proper blood calcium levels in dairy cows during critical transition period
OmniGen®	2004	Optimize immune function in dairy cows and improve productivity
Magni-Phi®	2015	Proprietary blend that helps to improve intestinal health and immune response which may lead to improved absorption and utilization of nutrients for poultry
Cellerate Yeast Solutions®	2017	Proprietary yeast culture products for all classes of livestock to help improve digestive health
Provia Prime™/MicroLife® Prime	2019	4-way combination direct-fed microbial for optimization of gut health, which leads to better pathogen control in poultry

AB20® is a natural flow agent that, when added to feed, improves the overall feed quality. The product is one of the most thoroughly researched in the flow agent product category.

Animate® is a patented anionic mineral supplement that helps optimize the health and performance of the transition dairy cow and improves profitability for dairy producers.

OmniGen® is a proprietary nutritional specialty product line designed to help maintain a cow's healthy immune system, improve their natural response to potential environmental stressors and health challenges, and improve productivity.

Magni-Phi® is a proprietary blend of saponins, triterpenoids and polyphenols (classes of phytogenic feed additives or natural botanicals) that helps improve intestinal health and immune response which may lead to improved absorption and utilization of nutrients for poultry.

Cellerate Yeast Solutions® is a line of proprietary yeast culture and yeast culture blends with yeast fractions and/or live cell yeast used in all classes of livestock and companion animals for improved digestive health. Improved digestive health may lead to improved animal health and performance.

Provia Prime™ and MicroLife® Prime represent a proprietary combination of four strains of bacillus-based direct-fed microbials that have been shown to promote beneficial gut bacteria, which can help promote health, immunity and productivity in poultry, which leads to lower pathogen challenges in commercial poultry production.

We market nutritional specialty products to livestock producers with the support of key influencers, such as animal nutritionists and veterinarians.

Vaccines

We develop, manufacture and market fully licensed and autogenous vaccines for poultry, swine, cattle and aquaculture globally. We also develop, manufacture and market vaccination devices. We produce vaccines that protect animals from either viral or bacterial disease challenges. Our vaccine products include:

Product	Market Entry	Description
V.H.™	1974	Live vaccine for the prevention of Newcastle Disease in poultry
Tailor-Made® Vaccines	1982	Autogenous vaccines against either bacterial or viral diseases in poultry, swine and cattle
MVP adjuvants®	1982	Components of veterinary vaccines that enhance the immune response to a vaccine
TAbic® M.B.	2004	Live vaccine for the prevention of Infectious Bursal Disease in poultry
MJPRRS®	2007	Autogenous vaccine for the prevention of porcine reproductive and respiratory syndrome ("PRRS") in swine
TAbic® IB VAR	2009	Live vaccine for the prevention of Infectious Bronchitis variant 1 strain 233A in poultry
TAbic® IB VAR206	2010	Live vaccine for the prevention of Infectious Bronchitis variant 206 in poultry
MB-1®	2017	Live vaccine for the prevention of Infections Bursal Disease in the hatchery in poultry
pHi-Tech®	2019	Portable electronic vaccination device and software that ensures proper delivery of vaccines and provides health management information
Phivax® SLE	2019	A live attenuated Salmonella Enteritidis vaccine for the control of Salmonella infection in chickens

The V.H. strain of Newcastle Disease vaccine is a pathogenic strain and is effective when applied by aerosol, coarse spray, drinking water or eye-drops. It has been used successfully under various management and climate conditions in many breeds of poultry.

Tailor-Made® vaccines are autogenous vaccines against either bacterial or viral diseases which contain antigens specific to each farm. We manufacture and sell these vaccines to U.S. veterinarians for use primarily in swine, poultry and cattle.

MVP adjuvants® are integral components used in veterinary vaccines which enhance the immune response to a vaccine. Our adjuvants include Emulsigen®, Emulsigen® D, Emulsigen® P, Carbigen® and Polygen®.

The M.B. strain of Gumboro vaccine is an intermediate virulence live vaccine strain used for the prevention of Infectious Bursal Disease in poultry. The intermediate strain was developed to provide protection against the new field epidemic virus, which is more virulent than those previously encountered.

MJPRRS®, an autogenous vaccine for swine, is administered to pregnant sows to protect their offspring from PRRS. This vaccine includes multiple PRRS isolates representing different virus strains of PRRS.

TAbic® IB VAR and TAbic® IB VAR206 vaccines are intermediate virulence live vaccine strains used for the prevention of infectious bronchitis in poultry. Both vaccines have become significant tools in the increasing fight against infectious bronchitis in regions throughout the world.

MB-1® is a live attenuated vaccine for Infectious Bursal disease in poultry, developed from the M.B. strain, adapted for in-ovo or subcutaneous injection in the hatchery.

pHi-Tech® is new technology in the form of a portable electronic vaccination device and software that ensures proper delivery of vaccines and provides health management information.

Phivax® is a vaccine used for the early protection of chicks in the presence of maternally derived antibodies to reduce mortality and morbidity associated with infection caused by infectious bursal disease virus.

We focus on innovation to produce new antigens or new presentations of antigens, and have developed new vaccines, such as the inactivated subunit Infectious Bursal Disease Virus and Egg Drop Syndrome vaccines, being sold as monovalent vaccines or in combinations with other antigens.

Mineral Nutrition

Our mineral nutrition products principally include inorganic and organic compounds of copper, zinc, cobalt, iron, selenium, manganese, magnesium and iodine.

Our mineral nutrition products also include GemStone®, our exclusive line of chelated organic trace minerals, including zinc, manganese, copper and iron glycine chelates. Our formulas feature high metal content to ensure greater mineral presence and preserve critical ration space. Each product is also highly chelated for superior bioavailability to maximize mineral absorption and minimize environmental impact. These organic trace minerals are available in a highly concentrated, easy-flowing granule.

Our mineral nutrition products also include the Vistore® portfolio of products, our chloride mineral option of value-driven trace mineral offerings. Our formulas feature high metal content to ensure optimal mineral presence and preserve critical ration space. High bioavailability also promotes maximized absorption for enhanced results and minimized waste.

Our major mineral nutrition customers are regional and national feed companies, distributors, co-ops, pre-mixers, integrated swine, beef and poultry producers and pet food manufacturers. The majority of our customers have nutrition staffs who determine their specific formulas for custom trace mineral premixes. Trace mineral costs and our selling prices fluctuate with commodity markets, and therefore, these products are price sensitive. Their sale requires a focused effort on cost management, quality control, customer service, pricing and logistics execution to be profitable.

Performance Products

Our Performance Products business manufactures and markets specialty ingredients for use in the personal care, industrial chemical and chemical catalyst industries. We operate the business through our PhibroChem (a division of PAHC), Ferro Metal and Chemical Corporation Limited and Phibro-Tech, Inc. (“Phibro-Tech”) business units.

Sales and Marketing

Our sales organization includes sales, marketing and technical support employees. In markets where we do not have a direct commercial presence, we generally contract with distributors that provide logistics and sales and marketing support for our products. Together, our Animal Health and Mineral Nutrition businesses have a sales, marketing and technical support organization of approximately 420 employees plus approximately 190 distributors who market our portfolio of approximately 690 product lines to livestock producers, veterinarians, nutritionists, animal feed companies and distributors in over 80 countries.

In markets where we have a direct commercial presence, we sell our animal health and mineral nutrition products through our local sales offices, either directly to integrated poultry, swine and cattle producers or through commercial animal feed manufacturers, wholesalers and distributors. Our sales representatives visit our customers, including livestock producers, veterinarians, nutritionists, animal feed companies and distributors, to inform, promote and sell our products and services. In direct service markets, our technical operations specialists provide scientific consulting focused on disease management and herd management, and training and education on diverse topics, including responsible product use.

We sell our Performance Products through our local sales offices to the personal care, industrial chemical and chemical catalyst industries. We market these products predominately in the United States.

Customers

We have approximately 3,790 customers, of which approximately 3,500 customers are served by our Animal Health and Mineral Nutrition businesses. We consider a diverse set of livestock producers, including poultry and swine operations and beef and dairy farmers, to be the primary customers of our livestock products. We sell our animal health and mineral nutrition products directly to livestock and aquaculture producers and to distributors that typically re-sell the products to livestock producers. We sell our companion animal product using a distributor calling on veterinary clinics. We do not consider the business to be dependent on a single customer or a few customers, and we believe the loss of any one customer would not have a material adverse effect on our results.

We typically sell pursuant to purchase orders from customers and generally do not enter into long-term delivery contracts.

Product Registrations, Patents and Trademarks

We own certain product registrations, patents, trade names and trademarks, and use know-how, trade secrets, formulae and manufacturing techniques, which assist in maintaining the competitive positions of certain of our products. We believe that technology is an important component of our competitive position, and it provides us with low-cost positions enabling us to produce high quality products. Patents protect some of our technology, but a significant portion of our competitive advantage is based on know-how built up over many years of commercial operation, which is protected as trade secrets. We own, or have exclusive rights to use under license, approximately 315 patents or pending applications in more than 30 countries but we believe that no single patent is of material importance to our business and, accordingly, that the expiration or termination thereof would not materially affect our business.

We market our animal health products under hundreds of governmental product registrations approving many of our products with respect to animal drug safety and efficacy. The use of many of our medicated products is regulated by authorities that are specific to each country, e.g., the FDA in the United States, Health Canada in Canada and European Food Safety Authority (“EFSA”) and the European Medicines Agency (“EMA”) in Europe. Medicated product registrations and requirements are country- and product-specific for each country in which they are sold. We continuously monitor, maintain and update the appropriate registration files pertaining to such regulations and approvals. In certain countries where we work with a third-party distributor, local regulatory requirements may require registration in the name of such distributor. As of June 30, 2022, we had approximately 935 Animal Health product registrations globally, including approximately 400 MFA registrations, 320 vaccine registrations and 215 registrations for nutritional specialty products. Our MFA global registrations included approximately 90 registrations for virginiamycin.

Additionally, many of our vaccine products are based on proprietary master seeds, proprietary adjuvant formulations or patented virus grouping technology. We actively seek to protect our proprietary information, including our trade secrets and proprietary know-how, by seeking to require our employees, consultants, advisors and partners to enter into confidentiality agreements and other arrangements upon the commencement of their employment or engagement.

We seek to file and maintain trademark registrations around the world based on commercial activities in most regions where we have, or desire to have, a business presence for a particular product or service. We currently maintain, or have rights to use under license, approximately 2,900 trademark registrations or pending applications globally, identifying goods and services related to our business.

Our technology, brands and other intellectual property are important elements of our business. We rely on patent, trademark, copyright and trade secret laws, as well as non-disclosure agreements, to protect our intellectual property rights. Our policy is to vigorously protect, enforce and defend our rights to our intellectual property, as appropriate.

Compliance with Government Regulation

Many of our animal health and mineral nutrition products require licensing by a governmental agency before marketing. To maintain compliance with these regulatory requirements, we have established processes, systems and dedicated resources with end-to-end involvement from product concept to launch and maintenance in the market. Our regulatory function seeks to engage in dialogue with various global agencies regarding their policies that relate to animal health products. For products that are currently subject to formal licensing by government agencies, our business relies on the ongoing approval and/or periodic re-approval of those licenses. Failure to maintain and, where applicable, renew those licenses for any reason including, but not limited to, changing regulations, more stringent technical, legal or regulatory requirements, or failure of the company or its agents to make timely, complete or accurate submissions, could result in suspension or loss of the company's rights to market its products in one or more countries.

United States

In the United States, governmental oversight of animal nutrition and health products is conducted primarily by the United States Department of Agriculture ("USDA") and/or the FDA. The United States Environmental Protection Agency (the "EPA") has jurisdiction over certain products applied topically to animals or to premises to control external parasites and shares regulatory jurisdiction of ethanol manufactured in biofuel manufacturing facilities with the FDA.

The USDA and the FDA are the agencies responsible for the safety and quality of the U.S. human food supply. The FDA regulates foods intended for human consumption and, through the Center for Veterinary Medicine ("CVM"), regulates the manufacture and distribution of animal drugs marketed in the U.S. including those administered to animals from which human foods are derived. All manufacturers of animal health pharmaceuticals marketed in the United States, must show their products to be safe, effective and produced by a consistent method of manufacture as defined under the Federal Food, Drug, and Cosmetic Act. To protect the food and drug supply, the FDA develops technical standards for human and animal drug safety, effectiveness, labeling and Good Manufacturing Practice. The CVM evaluates data necessary to support approvals of veterinary drugs. Drug sponsors are required to file reports of certain product quality defects and adverse events in accordance with agency requirements.

The main regulatory body in the United States for veterinary pesticides is the EPA. The EPA's Office of Pesticide Programs is responsible for the regulation of pesticide products applied to animals. All manufacturers of animal health pesticides must show their products will not cause "unreasonable adverse effects to man or the environment" as stated in the Federal Insecticide, Fungicide, and Rodenticide Act. Within the United States, pesticide products that are approved by the EPA must also be approved by individual state pesticide authorities before distribution in that state. Post-approval monitoring of products is required, with reports provided to the EPA and some state regulatory agencies.

FDA approval of Type A/B/C Medicated Feed Articles and drugs is based on satisfactory demonstration of safety, efficacy, manufacturing quality standards and appropriate labeling. Efficacy requirements are based on the desired label claim and encompass all species for which label indication is desired. Safety requirements include target animal safety and, in the case of food animals, human food safety (HFS). HFS reviews include drug residue levels and the safety of those residue levels. In addition to the safety and efficacy requirements for animal drugs used in food-producing animals, environmental safety must be demonstrated. Depending on the compound, the environmental studies may be quite extensive and expensive. In many instances, the regulatory hurdles for a drug that will be used in food-producing animals are at least as stringent as, if not more so than, those required for a drug used in humans. In addition, certain safety requirements relating to antimicrobial resistance must be met for antimicrobial products.

The CVM Office of New Animal Drug Evaluation is responsible for reviewing information submitted by drug sponsors who wish to obtain approval to manufacture and sell animal drugs. A new animal drug is deemed unsafe unless there is an approved New Animal Drug Application ("NADA"). Virtually all animal drugs are "new animal drugs" within the meaning of the term in the Federal Food, Drug, and Cosmetic Act. An approved Abbreviated New Animal Drug Application ("ANADA") is a generic equivalent of an NADA previously approved by the FDA. Both are regulated by the FDA. The drug development process for human therapeutics can be more involved than that for animal drugs. However, because human food safety and environmental safety are issues for food-producing animals, the animal drug

approval process for food-producing animals typically takes longer than for non-food-producing animals, such as companion animals.

The FDA may deny an NADA or ANADA if applicable regulatory criteria are not satisfied, require additional testing or information, or require post-marketing testing and surveillance to monitor the safety or efficacy of a product. There can be no assurances that FDA approval of any NADA or ANADA will be granted on a timely basis, or at all. Moreover, if regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which it may be marketed. Finally, product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing. Among the conditions for NADA or ANADA approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to FDA's current Good Manufacturing Practice ("cGMP") regulations. A manufacturing facility is periodically inspected by the FDA for determination of compliance with cGMP after an initial pre-approval inspection. Certain subsequent manufacturing changes must be approved by the FDA prior to implementation. In complying with standards set forth in these regulations, manufacturers must continue to expend time, monies and effort in the area of production and quality control to ensure compliance. The process of seeking FDA approvals can be costly, time consuming and subject to unanticipated and significant delays. There can be no assurance that such approvals will be granted on a timely basis, or at all. Any delay in obtaining or any failure to obtain FDA or foreign government approvals, or the suspension or revocation of such approvals, would adversely affect our ability to introduce and market our products and to generate revenue.

The issue of the potential for increased bacterial resistance to certain antibiotics used in certain food-producing animals is the subject of discussions on a worldwide basis and, in certain instances, has led to government restrictions on the use of antibiotics in these food-producing animals. The sale of antibiotics is a material portion of our business. Legislative bills are introduced in the United States Congress from time to time that, if adopted, could have an adverse effect on our business. One of these initiatives is a proposed bill called the Preservation of Antibiotics for Medical Treatment Act, which has been introduced in almost every Congress since the mid 2000's. To date, such bills have not had sufficient support to become law. Should statutory, regulatory or other developments result in restrictions on the sale of our products, it could have a material adverse impact on our financial position, results of operations and cash flows.

Virginiamycin. In November 2004, the CVM released a draft for comment of its risk assessment of streptogramin resistance for treatment of certain infections in humans attributable to the use of streptogramins in animals (the "risk assessment"). The risk assessment was initiated after approval of a human drug called Synercid® (quinupristin/dalfopristin) for treating vancomycin-resistant Enterococcus faecium (VREf), which led to increased attention regarding the use of streptogramins in animals. Synercid and virginiamycin (the active ingredient in our Stafac product) are both members of the streptogramin class of antimicrobial drugs. The risk assessment was unable to produce any firm conclusions as to whether, and, if so, how much, the use of virginiamycin in food animals contributes to the occurrence of streptogramin-resistant infections in humans via a foodborne pathway.

In classifying streptogramins in 2003 as a "medically important antimicrobial" ("MIA") on the CVM's Guidance for Industry ("GFI") 152 list, a guidance document for evaluating the microbial safety of antimicrobial new animal drugs on food for human consumption, the FDA's stated concern was the potential impact on use of Synercid for treating VREf in humans. In 2010, the U.S. label for Synercid was changed and the VREf indication was removed. The FDA determined that data submitted by the sponsor of Synercid failed to verify clinical benefit of the product for the treatment of VREf infections in humans. We have requested that the FDA remove the streptogramin class of antimicrobials from GFI 152 to reflect that they are not "medically important" for human therapy, however, the FDA has declined our request. There can be no assurance that we will be successful in the future in gaining the FDA's agreement with our view that streptogramins are no longer medically important and accordingly that this antimicrobial class should be removed from the GFI 152 list of MIAs. The FDA has announced its intention to further review the GFI 152 list and to review labelling directions of products on the GFI 152 list, which may lead to increased restrictions on the use of these products.

MIAs. Effective January 2017, the CVM's revised Veterinary Feed Directive ("VFD") regulations, which included changes to the control and use of antimicrobial products for use in animal feed, require that affected antimicrobial products may only be used if authorized by a veterinarian in accordance with the regulations. Prior to implementation of the revised VFD regulations, many approved antimicrobial products could be obtained and used without formal veterinary authorization.

In January 2017, the FDA and industry, including us, completed the process of label changes for MIA products to remove production claims and to limit the use of MIAs to those uses that are considered necessary for assuring animal health, namely for the prevention, control and/or treatment of disease, and that MIA use in food-producing animals should include veterinary oversight or consultation. The label changes were the result of recommendations from the CVM, as described in GFI 213 ("New Animal Drugs and New Animal Drug Combination Products Administered in or on Medicated Feed or Drinking Water of Food-Producing Animals: Recommendations for Drug Sponsors for Voluntarily Aligning Product Use Conditions with GFI 209") and GFI 209 ("The Judicious Use of Medically Important Antimicrobial Drugs in Food-Producing Animals").

Carbadox. In April 2016, the FDA began initial steps to withdraw approval of carbadox (the active ingredient in our Mecadox product) via a regulatory process known as a Notice of Opportunity for Hearing ("NOOH"), due to concerns that certain residues from the product may persist in animal tissues for longer than previously determined. The NOOH process provided Phibro with an opportunity to defend the safety of carbadox prior to the FDA taking final steps to remove carbadox from the market. Over the next four years, as part of an ongoing process of responding to the inquiries from the FDA's Center of Veterinary Medicine ("CVM"), we provided extensive and meticulous research and data that confirmed the safety of carbadox. In March 2018, the FDA indefinitely stayed the withdrawal proceedings. In July 2020, the FDA announced it does not agree with Phibro's scientific conclusions that carbadox is safe under the current conditions of use. Instead of proceeding to a hearing on the scientific concerns raised in the 2016 NOOH, consistent with the normal regulatory procedure, the FDA announced that it was withdrawing the current NOOH, and issuing a proposed order to review the regulatory method for carbadox. The approved regulatory method determines if there are residues of carcinogenic concern in animal tissue at the time of slaughter. If the order is finalized, the FDA has indicated it plans to issue a new NOOH proposing the withdrawal of carbadox from the market because of a lack of an approved regulatory method.

In September 2020, Phibro commented on the proposed order, reiterating the safety of carbadox and the appropriateness of the regulatory method, and further offered to work with the CVM to generate additional data to support the existing regulatory method or select a suitable alternative regulatory method. Phibro disagreed with the agency's actions and submitted a request to the FDA Office of the Commissioner that the agency continue the NOOH process it started in 2016 and proceed with a hearing to review the substantial body of data supporting the safety of carbadox.

In March 2022, the FDA held a Part 15 virtual public hearing seeking data and information related to the safety of carbadox. Phibro has continued an ongoing process of responding collaboratively and transparently to CVM's inquiries to provide extensive and meticulous research and data that confirm the safety of carbadox. Carbadox has been approved and sold in the United States for 50 years and is a widely used treatment for controlling bacterial diseases in swine, including Salmonella and Swine Dysentery. In the event the FDA continues to assert that carbadox should be removed from the market, we will argue that we are entitled to and expect to have a full evidentiary hearing on the merits before an administrative law judge. Should we be unable to successfully defend the safety of the product, the loss of carbadox sales will have an adverse effect on our financial condition and results of operations. Sales of Mecadox (carbadox) for the twelve months ended June 30, 2022, were $21 million. As of the date of this Annual Report on Form 10-K, Mecadox continues to be available for use by swine producers.

Manufacturing. The FDA routinely carries out audits related to cGMP standards for manufacturing facilities that make veterinary drug products and active pharmaceutical ingredients approved for sale in the U.S. The FDA inspectors may make observations during these inspections, which may require corrective action in order for the manufacturing facility to remain in compliance with cGMP standards. Failure to take such corrective actions could result in the manufacturing facility being ineligible to receive future FDA approvals. In very serious cases of noncompliance with cGMP standards, the FDA may issue a warning letter which could result in products produced in such manufacturing facilities to be ineligible for sale in the U.S. Although it is our objective to remain in full conformance with U.S. cGMP standards, we have in the past received adverse observations and may in the future receive adverse observations or warning letters. Failure to comply with cGMP standards could have a material impact on our business and financial results.

European Union

European Union ("E.U.") legislation requires that veterinary medicinal products must have a marketing authorization before they are placed on the market in the European Union. A veterinary medicinal product must meet

certain quality, safety, efficacy and environmental criteria to receive a marketing authorization. The European Medicines Agency (and its main veterinary scientific committee, the Committee for Medicinal Products for Veterinary Use) and the national authorities in the various E.U. Member States, are responsible for administering this regime.

A separate E.U. regime applies to feed additives. It provides for a re-registration process for existing additives and this process is ongoing. For certain types of additives, the authorizations are not generic in nature (so that they can be relied upon by any operator) but are limited to the company that obtained the marketing authorization. They are known as Brand Specific Approvals ("BSA"). The system is similar to the U.S. system, where regulatory approval is for the formulated product or "brand."

The EFSA is responsible for the E.U. risk assessment regarding food and feed safety. Operating under the European Commission, in close collaboration with national authorities and in open consultation with its stakeholders, the EFSA provides independent scientific advice and communication on existing and emerging risks. The EFSA may issue advice regarding the process of adopting or revising European legislation on food or feed safety, deciding whether to approve regulated substances such as pesticides and food additives, or developing new regulatory frameworks and policies, for instance, in the field of nutrition. The EFSA aims to provide appropriate, consistent, accurate and timely communications on food safety issues to all stakeholders and the public at large, based on the Authority's risk assessments and scientific expertise. The containment of antimicrobial resistance is one of the key areas of concern for the EFSA, EMA, the European Commission and its Directorates, the European Parliament and European Member State Governments.

A number of manufacturers, including us, submitted dossiers in order to re-register various anticoccidials for the purpose of obtaining regulatory approval from the European Commission. The BSA for our nicarbazin product was published in October 2010. Our reauthorization submission was made on time and is pending. We sell nicarbazin under our own BSA and as an active ingredient for another marketer's product that has obtained a BSA and is sold in the European Union. Similarly, a BSA for our semduramicin product, Aviax, was published in 2006 and our reauthorization submission was made on time and is pending. We have submitted a dossier for reauthorization in accordance with the requirements of the EFSA and responded to requests for additional information from the EFSA by submitting additional data for each product. The current BSAs remain valid while the EFSA reviews the additional data we have submitted. There can be no guarantee that these submissions will be reviewed favorably or in a timely manner. Failure to gain reauthorization in a timely manner could have an adverse financial impact on our business.

The Delegating and Implementing Acts under E.U. Regulation 2019/6 includes provisions that could require animals or animal origin products imported into the E.U. from other countries to be produced under the same conditions as are required in the E.U. This may preclude the use of veterinary products not approved in the E.U. or require animal health products to be used in the manner approved in the E.U. If such restrictions are implemented, they could result in a reduction or elimination of the use of our products, especially our antibacterial products, in countries that export animals or animal origin products to the E.U. and other countries that align their regulations with E.U. regulations.

Brazil

The Ministry of Agriculture, Livestock Production and Supply ("MAPA") is the regulatory body in Brazil responsible for the regulation and control of pharmaceuticals, biologicals and medicinal feed additives for animal use. MAPA's regulatory activities are conducted through the Secretary of Agricultural Defense and its Livestock Products Inspection Department. These activities include the inspection and licensing of both manufacturing and commercial establishments for veterinary products, as well as the submission, review and approval of pharmaceuticals, biologicals and medicinal feed additives.

Other Countries

We are subject to regulatory requirements governing investigation, clinical trials and marketing approval for animal drugs in many other countries in which our products are sold. The regulatory approval process includes similar risks to those associated with the FDA and European Commission approvals set forth above.

Global policy and guidance

Country-specific regulatory laws have provisions that include requirements for certain labeling, safety, efficacy and manufacturers' quality procedures (to assure the consistency of the products), as well as company records and reports. With the exception of Australia, Canada, Japan and New Zealand, most other countries' regulatory agencies will generally refer to the FDA, USDA, European Union and other international animal health entities, including the World Organization for Animal Health, Codex Alimentarius Commission, the recognized international standard-setting body for food ("Codex"), before establishing their own standards and regulations for veterinary pharmaceuticals and vaccines.

The Joint FAO/WHO Expert Committee on Food Additives is an international expert scientific committee that is administered jointly by the Food and Agriculture Organization of the United Nations and the World Health Organization. It provides risk assessments and safety evaluations of residues of veterinary drugs in animal products as well as exposure and residue definition and maximum residue limit proposals for veterinary drugs in traded food commodities. These internationally published references may also be used by national authorities when setting domestic standards. We work with the national authorities to establish acceptable safe levels of residual product in food-producing animals after treatment. This in turn enables the calculation of appropriate withdrawal times for our products prior to an animal entering the food chain.

In July 2014, the Codex adopted risk management advice language for a number of compounds including carbadox. The advice language states "authorities should prevent residues of carbadox in food. This can be accomplished by not using carbadox in food producing animals." The advice language is to provide advice only and is not binding on individual national authorities, and almost all national authorities already have long-established regulatory standards for carbadox, including prohibiting the use of carbadox in swine production within their territory, prohibiting the importation of pork from swine that are fed carbadox, or permitting the importation of pork from swine that are fed carbadox provided there is no detection of carbadox residues in the meat. The advice language may be considered by national authorities in making future risk management determinations. To the extent additional national authorities elect to follow the advice and prohibit the use of carbadox in food-producing animals and/or the importation of pork from swine that are fed carbadox, such decisions could have an adverse effect on our sales of carbadox in those countries or in countries that produce meat for export to those countries.

Advertising and promotion review

Promotion of animal health products is controlled by regulations in many countries. These rules generally restrict advertising and promotion to those approved claims and uses that have been reviewed and endorsed by the applicable agency. We conduct a review of promotion material for compliance with the local and regional requirements in the markets where we sell animal health products.

Food Safety Inspection Service/Generally Recognized As Safe

The FDA is authorized to determine the safety of substances (including "generally recognized as safe" or "GRAS" substances, and food and feed additives), as well as prescribing safe conditions of use. The FDA, which has the responsibility for determining the safety of substances, together with the Food Safety and Inspection Service, the food safety branch within the USDA, maintain the authority in the United States to determine that new substances and new uses of previously approved substances are suitable for use in meat, milk and poultry products.

Competition

We are engaged in highly competitive industries and, with respect to all our major products, face competition from a substantial number of global and regional competitors. Some competitors have greater financial, R&D, manufacturing and other resources than we have. Our competitive position is based principally on our product registrations, customer service and support, breadth of product line, product quality, manufacturing technology, facility locations and product prices. We face competition in every market in which we participate. Many of our products face competition from products that may be used as an alternative or substitute.

There has been, and there may continue to be, consolidation in the animal health market, which could strengthen our competitors. Our competitors can be expected to continue to improve the design and performance of their products and to introduce new products with competitive price and performance characteristics. There can be no assurance that we

will have sufficient resources to maintain our current competitive position, however, we believe the following strengths create sustainable competitive advantages that will enable us to continue our growth as a leader in our industry:

Products Aligned with Need for Increased Protein Production

Increased scarcity of natural resources is increasing the need for efficient production of food animals such as poultry, swine and cattle. Our animal health products, including our MFAs, vaccines and nutritional specialty products, help prevent and manage disease outbreaks and enhance nutrition to help support natural defenses against diseases. These products are often critical to our customers' efficient production of healthy animals. Our leading MFAs product franchise, Stafac/V-Max/Eskalin, is approved in over 30 countries for use in poultry, swine and cattle and is regarded as one of the leading MFA products for production animals. Our nicarbazin and amprolium MFAs are globally recognized anticoccidials. Our nutritional specialty product offerings such as OmniGen-AF and Animate are used increasingly in the global dairy industry, and Magni-Phi and Provia Prime/MicroLife Prime are rapidly becoming important products for poultry producers. Our vaccine products are effective against critical diseases in poultry, swine and cattle.

Global Presence with Existing Infrastructure in Key High-Growth Markets

We have an established direct presence in many important emerging markets, and we believe we are a leader in many of the emerging markets in which we operate. Our existing operations and established sales, marketing and distribution network in over 80 countries provide us with opportunities to take advantage of global growth opportunities. Outside of the United States, our global footprint reaches to key high growth regions (countries where the livestock production growth rate is expected to be higher than the average growth rate) including Brazil and other countries in South America, China, India and Southeast Asia, Russia and former CIS countries, Mexico, Turkey, Australia, Canada and South Africa and other countries in Africa. Our operations in countries outside of the United States contributed approximately 59% of our Animal Health segment revenues for the year ended June 30, 2022.

Leading Positions in High Growth Sub-sectors of the Animal Health Market

We are a global leader in the development, manufacture and commercialization of MFAs and nutritional specialty products for the animal health market. We believe we are well positioned in the fastest growing food animal species segments of the animal health market with significant presence in poultry and swine. We believe our sales of MFA products were third largest in the animal health market.

Diversified and Complementary Product Portfolio with Strong Brand Name Recognition

We market products across the three largest livestock species (poultry, cattle and swine) and aquaculture and in the major product categories (MFAs, vaccines and nutritional specialty products). We believe our diversity of species and product categories enhances our sales mix and lowers our sales concentration risk. The complementary nature of our Animal Health and Mineral Nutrition portfolio provides us with unique cross-selling opportunities that can be used to gain access to new customers or deepen our relationships with existing customers. We believe we have strong brand name recognition for the Phibro name and for many of our animal health and mineral nutrition products, and we believe Phibro vaccines are recognized as an industry standard in efficacy against highly virulent disease challenges. Our diverse portfolio of products also allows us to address the distinct growing conditions of livestock in different regions.

Experienced Sales Force and Technical Support Staff with Strong, Consultative Customer Relationships

Within our Animal Health and Mineral Nutrition segments, utilizing both our sales, marketing and technical support organization of approximately 420 employees and a broad distribution network, we market our portfolio of more than 690 product lines to livestock producers and veterinarians in over 80 countries. We interact with customers at both their corporate and operating level, which we believe allows us to develop an in-depth understanding of their needs. Our technical support and research personnel are also important contributors to our overall sales effort. We have a total of approximately 120 technical, field service and quality control/quality assurance personnel throughout the world. These professionals interface directly with our key customers to provide practical solutions to derive optimum benefits from our products.

Experienced, Committed Employees and Management Team

We have a diverse and highly skilled team of animal health professionals, including technical and field service personnel located in key countries throughout the world. These individuals have extensive field experience and are vital to helping us maintain and grow our business. Many of our field team have more than 20 years of experience in the animal health industry and many have been with us for more than 10 years.

We have a strong management team with a proven track record of success at both the corporate and operating levels. The executive management team has diverse backgrounds and on average more than 30 years of experience the animal health or related industry.

Human Capital

As of June 30, 2022, we had approximately 1,860 employees in 55 locations spanning 26 countries. Certain of our Brazilian employees are covered by multi-employer regional industry-specific unions. Certain of our Israeli employees are covered by site-specific collective bargaining agreements. Certain employees are covered by individual employment agreements.

We strive to nurture a strong culture that empowers team members and provides opportunities for growth and development. The Denison Organization Culture survey was administered to all employees globally in 2017 and 2021, with at least a 75 percent response rate each time. Phibro employee engagement and commitment scores remained consistent in 2017 and 2021 at 82 percent favorable for engagement and 76 percent favorable for commitment. We are intently focused on maintaining these results across the organization.

At Phibro we view the strength of our team as a critical component of our success. The following principles, which guide our decisions and actions, provide an overview of how we approach management of human capital resources.

Our Most Valuable Asset – The Company and its Employees

We recognize that our employees provide the competitive edge needed to compete successfully in world markets. We adhere to human resources policies and practices that meet the needs of the business and the individual, so that we can attract and retain the highest caliber employees. Talent development is a strategic priority at Phibro, and we offer opportunities for growth at all levels of the company. Our goal is to ensure we have the right colleagues with the right skills in the right roles and with the appropriate support to build leadership capabilities and drive organizational results. As business priorities evolve and we seek to innovate, we work to nurture and develop current talent to best serve future needs. We take a programmatic and focused approach to developing our people.

Achievement of business objectives and the fulfillment of individual career aspirations are reinforced by our competitive compensation and benefit programs, comprehensive training and development programs, health and safety programs that promote and safeguard employees' well-being, and work environments that are conducive to the successful application of skills and knowledge. In addition to traditional professional development, we offer a robust, cloud-based online training curriculum from one of the leading providers of development material for learning-focused organizations.

Employee safety is paramount. In 2017, we launched the Road to Zero initiative, which utilizes teaming concepts to elevate employee involvement in project-based improvement activities. Participation drives a strong culture of safety and quality. Road to Zero provides a formal system for engagement, shared responsibility, leadership opportunities, meaningful contributions and accountability. We have and will continue to take the necessary daily precautions as recommended by local government authorities to keep our employees safe.

Strength Through Diversity, Equity & Inclusion (DEI)

We create a positive and supportive work environment for our employees. Our approach enables opportunity for inclusion and encourages diverse perspectives and thinking to maximize the achievement of innovative and successful outcomes. We aim to protect employees from being discriminated against because of gender, sexual orientation, age, marital status, race, religion, political beliefs, ethnic background, country of origin, language or non-job-related disabilities, and we follow these same principles when recruiting new talent to our organization. We implemented a new

DEI training program to foster awareness and acceptance across our administration, R&D and manufacturing facilities in 2022.

Respecting Employees

Phibro employees are our greatest strength and most valuable asset. When we equip team members to apply their skills, talent and passions to contribute and make a positive impact, everyone succeeds. When we thrive as individuals and teams, the Company thrives. We promote from within wherever possible, safeguard the confidentiality of employee records and keep employees informed of issues affecting them.

Cultivating One Leader at a Time

Our proprietary Leadership Model is a framework that guides how our people plan and act to advance company priorities. We strive for each executive/manager/employee to be consistently challenged to:

- See what needs to be done (strategy, vision, growth),
- Get it done (execution), and
- Get it done the right way (how you do it).

Recognizing that leadership may be exhibited differently by an individual contributor versus a first-line manager versus an upper-level manager, all Phibro employees are consistently expected to demonstrate leadership behaviors.

Manufacturing

The Animal Health business segment manufactures many products internally and supplements that production with contract manufacturing organizations ("CMOs") as necessary.

We manufacture active pharmaceutical ingredients for certain of our antibacterial and anticoccidial products in Guarulhos, Brazil and Braganca Paulista, Brazil. We manufacture active pharmaceutical ingredients for certain of our anticoccidial and antimicrobial products in Neot Hovav, Israel. We produce vaccines in Beit Shemesh, Israel, Sligo, Ireland and Omaha, Nebraska. We produce adjuvants in Omaha, Nebraska. We produce pharmaceuticals, disinfectants and other animal health products in Petach Tikva, Israel. We produce certain of our nutritional specialty products in Quincy and Chillicothe, Illinois and Sarasota, Florida. We produce certain of our mineral nutrition products in Quincy, Illinois and Omaha, Nebraska.

We supplement internal manufacturing and production capabilities with CMOs. We purchase certain active pharmaceutical ingredients for other medicated products from CMOs in China, India and other locations. We then formulate the final dosage form in our facilities and in contract facilities located in Argentina, Australia, Brazil, Canada, China, Israel, Malaysia, Mexico, South Africa and the United States.

We purchase certain raw materials necessary for the commercial production of our products from a variety of third-party suppliers. Such raw materials are generally available from multiple sources, are purchased worldwide and are normally available in quantities adequate to meet the needs of the Company's business.

We believe that our existing facilities, as supplemented by CMOs, are adequate for our current requirements and for our operations in the foreseeable future.

Research and Development

Most of our manufacturing facilities have chemists and technicians on staff involved in product development, quality assurance, quality control and providing technical services to customers. Research, development and technical service efforts are conducted by our veterinarians (DVMs) and nutritionists at various facilities.

We operate Animal Health R&D and product testing at our facilities in: Guarulhos, Brazil; Beit Shemesh, Israel; Neot Hovav, Israel; Ma'ayan Tzvi, Israel; Quincy, Illinois; Corvallis, Oregon; State College, Pennsylvania; Sarasota, Florida; Manhattan, Kansas; St. Paul, Minnesota; and Omaha, Nebraska. We also engage various independent contract research organizations to undertake research and development activities.

These facilities provide R&D services relating to: fermentation development and micro-biological strain improvement; vaccine development; chemical synthesis and formulation development; nutritional specialty product development; and ethanol-related products.

Environmental, Health and Safety

Our operations and properties are subject to Environmental Laws (as defined below) and regulations. We have incurred, and will continue to incur, expenses to attain and maintain compliance with Environmental Laws. While we believe that our operations are currently in material compliance with Environmental Laws, we have, from time to time, received notices of violation from governmental authorities, and have been involved in civil or criminal action for such violations, including for odor releases in Guarulhos, Brazil. Additionally, at various sites, our subsidiaries are engaged in continuing investigation, remediation and/or monitoring to address contamination associated with historical operations. We maintain accruals for costs and liabilities associated with Environmental Laws, which we currently believe are adequate. In many instances, it is difficult to predict the ultimate costs under Environmental Laws and the time period during which such costs are likely to be incurred.

Governmental authorities have the power to enforce compliance with their regulations. Violators of Environmental Laws may be subject to civil, criminal and administrative penalties, injunctions or both. Failure to comply with Environmental Laws may result in the temporary or permanent suspension of operations and/or permits, limitations on production, or increased operating costs. In addition, private plaintiffs may initiate lawsuits for personal injury, property damage, diminution in property value or other relief as a result of our operations. Environmental Laws, and the interpretation or enforcement thereof, are subject to change and may become more stringent in the future, potentially resulting in substantial future costs or capital or operating expenses. We devote considerable resources to complying with Environmental Laws and managing environmental liabilities. We have developed programs to identify requirements under and maintain compliance with Environmental Laws; however, we cannot predict with certainty the impact of increased and more stringent regulation on our operations, future capital expenditure requirements, or the cost of compliance. Based upon our experience to date, we believe that the future cost of compliance with existing Environmental Laws, and liabilities for known environmental claims pursuant to such Environmental Laws, will not have a material adverse effect on our financial position, results of operations, cash flows or liquidity.

Environmental, Health and Safety Regulations

The following summarizes the principal Environmental Laws affecting our business.

Waste Management. Our operations are subject to statutes and regulations addressing the contamination by, and management of, hazardous substances and solid and hazardous wastes. In the United States, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), also known as the "Superfund" law, and comparable state laws, generally impose strict joint and several liability for costs of investigation and remediation and related liabilities, on defined classes of "potentially responsible parties" ("PRPs"). PRPs can be required to bear all of such costs regardless of fault, the legality of the original disposal or ownership of the disposal site. We have been, and may become, subject to liability under CERCLA for cleanup costs or investigation or clean up obligations or related third-party claims in connection with releases of hazardous substances at or from our current or former sites or offsite waste disposal facilities used by us, including those caused by predecessors or relating to divested properties or operations.

We must also comply with the Resource Conservation and Recovery Act of 1976, as amended ("RCRA"), and comparable state laws regulating the treatment, storage, disposal, remediation and transportation of solid and hazardous wastes. These laws impose management requirements on generators and transporters of such wastes and on the owners and operators of treatment, storage and disposal facilities. As current or historic recyclers of chemical waste, certain of our subsidiaries have been, and are likely to be, the focus of extensive compliance reviews by environmental regulatory authorities under RCRA. Our subsidiary Phibro-Tech currently has a RCRA operating permit for its Santa Fe Springs, California facility, for which a renewal application is under review. Phibro-Tech initially submitted an application for renewal of its permit for the Santa Fe Springs facility in 1996. We are unable to predict when the State of California will issue a draft permit for public review and comment. Until the State of California issues its final decision on the renewal application, the facility is continuing to operate under the exiting permit. Phibro-Tech has updated its permit application on several occasions, and DTSC has approved a number of permit modifications to the existing permit. In addition, because we or our subsidiaries have closed several facilities that had been the subject of RCRA permits, we or our

subsidiaries have been and will be required to investigate and remediate certain environmental contamination conditions at these shutdown plant sites within the requirements of RCRA corrective action programs.

Federal Water Pollution Control Act, as amended. We must comply with regulations related to the discharge of pollutants to the waters of the United States without governmental authorization, including those pursuant to the Federal Water Pollution Control Act.

Chemical Product Registration Requirements. We must comply with regulations related to the testing, manufacturing, labeling, registration and safety analysis of our products in order to distribute many of our products, including, for example, in the United States, the federal Toxic Substances Control Act and Federal Insecticide, Fungicide and Rodenticide Act, and in the European Union, the Regulation on Registration, Evaluation, Authorization and Restriction of Chemical Substances ("REACH").

Air Emissions. Our operations are subject to the U.S. Clean Air Act (the "CAA") and comparable U.S. state and foreign statutes and regulations, which regulate emissions of various air pollutants and contaminants. Certain of the CAA's regulatory programs are the subject of ongoing review and/or are subject to ongoing litigation, such as the rules establishing new Maximum Achievable Control Technology for industrial boilers; significant expenditures may be required to meet current and emerging air quality standards. Regulatory agencies can also impose administrative, civil and criminal penalties for non-compliance with air permits or other air quality regulations. States may choose to set more stringent air emissions rules than those in the CAA. State, national and international authorities have also issued requirements focusing on greenhouse gas reductions. In the United States, the EPA has promulgated federal greenhouse gas regulations under the CAA affecting certain sources. In addition, a number of state, local and regional greenhouse gas initiatives are also being developed or are already in place. In Israel and Brazil, implementation of the Kyoto Protocol requirements regarding greenhouse gas emission reductions consists of energy efficiency regulations, carbon dioxide emissions allowances trading and renewable energy requirements.

Capital Expenditures

We have incurred and expect to continue to incur costs to maintain compliance with environmental, health and safety laws and regulations. Our capital expenditures relating to environmental, health and safety regulations were $2.7 million for the fiscal year ended June 30, 2022. See "Business — Environmental, Health and Safety Regulations" for further descriptions. Our environmental capital expenditure plans cover, among other things, the currently expected costs associated with known permit requirements relating to facility improvements.

Contamination and Hazardous Substance Risks

Investigation, Remediation and Monitoring Activities. Certain of PAHC's subsidiaries that are currently or were historically engaged in recycling and other activities involving hazardous materials have been required to perform site investigations at their active, closed and former facilities and neighboring properties. Contamination of soil, groundwater and other environmental media has been identified or is suspected at several of these locations, including Santa Fe Springs, California; Powder Springs, Georgia; Union, Illinois; Sewaren, New Jersey; Sumter, South Carolina; and Joliet, Illinois, and regulatory authorities have required, and will continue to require, further investigation, corrective action and monitoring over future years. These subsidiaries also have been, and in the future may be, required to undertake additional capital improvements as part of these actions. In addition, RCRA and other applicable statutes and regulations require these subsidiaries to develop closure and post-closure plans for their facilities and in the event of a facility closure, obtain a permit that sets forth a closure plan for investigation, remediation and monitoring and requires post-closure monitoring and maintenance for up to 30 years. We believe we are in material compliance with these requirements and maintain adequate reserves to complete remediation and monitoring obligations at these locations.

In connection with past acquisitions and divestitures, we have undertaken certain indemnification obligations that require us, or may in the future require us, to conduct or finance environmental cleanups at sites we no longer own or operate. Under the terms of the sale of the former facility in Joliet, Illinois, Phibro-Tech remains responsible for any required investigation and remediation of the site attributable to conditions at the site at the time of the February 2011 sale date, and we believe we have sufficient reserves to cover the cost of the remediation.

PRP at Omega Chemical Superfund Site. The EPA is investigating and planning for the remediation of offsite contaminated groundwater that has migrated from the Omega Chemical Corporation Superfund Site ("Omega Chemical Site"), which is upgradient of Phibro-Tech's Santa Fe Springs, California facility. The EPA has entered into a settlement

agreement with a group of companies that sent chemicals to the Omega Chemical Site for processing and recycling ("OPOG") to remediate the contaminated groundwater that has migrated from the Omega Chemical Site in accordance with a general remedy selected by EPA. The EPA has named Phibro-Tech and certain other subsidiaries of PAHC as PRPs due to groundwater contamination from Phibro-Tech's Santa Fe Springs facility that has allegedly commingled with contaminated groundwater from the Omega Chemical Site. In September 2012, the EPA notified approximately 140 PRPs, including Phibro-Tech and the other subsidiaries, that they have been identified as potentially responsible for remedial action for the groundwater plume affected by the Omega Chemical Site and for EPA oversight and response costs. Phibro-Tech contends that any groundwater contamination at its site is localized and due to historical operations that pre-date Phibro-Tech and/or contaminated groundwater that has migrated from upgradient properties. In addition, a successor to a prior owner of the Phibro-Tech site has asserted that PAHC and Phibro-Tech are obligated to provide indemnification for its potential liability and defense costs relating to the groundwater plume affected by the Omega Chemical Site. PAHC and Phibro-Tech have vigorously contested this position and have asserted that the successor to the prior owner is required to indemnify Phibro-Tech for its potential liability and defense costs. Furthermore, several members of OPOG filed a complaint under CERCLA and RCRA in the United States District Court for the Central District of California against many of the PRPs allegedly associated with the groundwater plume affected by the Omega Chemical Site (including Phibro-Tech) for contribution toward past and future costs associated with the investigation and remediation of the groundwater plume affected by the Omega Chemical Site, and the United States Department of Justice, on behalf of the EPA, sent Phibro-Tech and certain other PRPs a pre-litigation notice letter in August 2022 regarding potential CERCLA Sec. 107 cost recovery claims seeking unrecovered past costs related to the groundwater plume affected by the Omega Chemical Site, along with a declaration allocating liability for future costs. Due to the ongoing nature of the EPA's investigation, the preliminary stage of the ongoing litigation and Phibro-Tech's dispute with the prior owner's successor, at this time we cannot predict with any degree of certainty what, if any, liability Phibro-Tech or the other subsidiaries may ultimately have for investigation, remediation and the EPA oversight and response costs associated with the affected groundwater plume.

Potential Claims. In addition to cleanup obligations, we could also be held liable for all consequences arising out of human exposure to hazardous substances or other environmental damage, which liability may not be covered by insurance.

Environmental Accruals and Financial Assurance. We have established environmental accruals to cover known remediation and monitoring costs at certain of our current and former facilities. Our accruals for environmental liabilities are recorded by calculating our best estimate of probable and reasonably estimable future costs using current information that is available at the time of the accrual. Our accruals for environmental liabilities totaled $4.3 million as of June 30, 2022 and 2021.

In certain instances, regulatory authorities have required us to provide financial assurance for estimated costs of remediation, corrective action, monitoring and closure and post-closure plans. Our subsidiaries, in most instances, have chosen to provide the required financial assurance by means of surety bonds or letters of credit issued pursuant to our revolving credit facility. As of June 30, 2022, surety bonds and letters of credit provided $12.4 million of financial assurance.

Workplace Health and Safety

We are committed to manufacturing safe products and achieving a safe workplace. Our Environmental Health and Safety ("EHS") Global Director, along with regional and site-based EHS professionals, manage environmental, health and safety matters throughout the Company. The site managers are responsible for implementing the established EHS controls. To protect employees, we have established health and safety policies, programs and processes at all our manufacturing sites. An external EHS audit is performed at each of our sites as needed based on the conditions at the respective sites.

Where You Can Find More Information

We are subject to the information and periodic and current reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and, in accordance therewith, will file periodic and current reports, proxy statements and other information with the Securities and Exchange Commission ("SEC"). Such periodic and current reports, proxy statements and other information will be available to the public on the SEC's website at www.sec.gov and through our website at www.pahc.com.

Item 1A. Risk Factors

Risk Factors Summary

For a summary of risk factors, see our "Forward-Looking Statements and Risk Factors Summary" on page 3.

Risk Factors

You should carefully consider all of the information set forth in this Annual Report on Form 10-K, including the following risk factors, before deciding to invest in our Class A common stock. If any of the following risks actually occurs, our business, financial condition, results of operation or cash flows could be materially adversely affected. In any such case, the trading price of our Class A common stock could decline, and you could lose all or part of your investment. The risks below are not the only ones the Company faces. Additional risks not currently known to the Company or that the Company presently deems immaterial may also impair its business operations. This Annual Report on Form 10-K also contains forward-looking statements that involve risks and uncertainties. The Company's results could materially differ from those anticipated in these forward-looking statements as a result of certain factors, including the risks it faces described below and elsewhere. See also "Forward-Looking Statements and Risk Factors Summary."

Risk Factors Relating to Our Business

A pandemic, epidemic, or outbreak of an infectious disease in humans, such as COVID-19, may materially and adversely affect our business and our financial results.

Our business is exposed to risks associated with public health crises, including epidemics and pandemics such as the novel coronavirus (COVID-19). The COVID-19 pandemic has adversely affected workforces, customers, suppliers, consumer sentiment, economies and financial markets and has led to an economic downturn in many countries in which we operate. Disruptions due to COVID-19 or other similar health epidemics could extend to our manufacturing facilities and our supply chain, as well as to our customers and end users of our products who raise animals or who process meat, milk, eggs and seafood for human consumption. The continued spread of COVID-19 or other disease epidemics, such as a worsening of the outbreak of Monkeypox, which was confirmed in May 2022, may result in a period of economic and business disruption and could have a material adverse impact on our business and financial results.

The COVID-19 pandemic has and could continue to negatively impact manufacturing of our products, disruptions in our logistics and supply chain operations such as difficulty in importing and exporting our products or raw materials, and difficulties related to the transport of our products. These limitations and restrictions from the COVID-19 pandemic or similar outbreak of an infectious disease could also negatively affect operations at our third-party manufacturers and suppliers, which could result in delays or disruptions in the supply of the products and raw materials that they manufacture for us and increase the costs of such products and raw materials, both of which could ultimately negatively impact sales of our products.

The COVID-19 pandemic and similar outbreaks could lead to decreased demand for protein, which may lead to end users of our products reducing their herd or flock sizes. Protein processing plants may reduce or temporarily cease operations due to quarantines and "social distancing" requirements, which may also result in end users of our products reducing herd or flock sizes due to lack of processing capacity. In addition, demand for protein could be reduced because consumers may associate human health fears related to COVID-19 of other outbreaks with animal diseases, food, food production or food animals, whether or not it is scientifically valid. Reductions in demand for animal protein resulting from these factors could in turn affect the demand for our products in a manner that has a significant adverse effect on our financial condition and results of operations.

The impact of the COVID-19 pandemic or similar health epidemics is uncertain and subject to change. The pandemic may have significant economic impacts on customers, suppliers and markets. We cannot presently predict with certainty the full scope and severity of any potential disruptions to our business, operating results, cash flows and/or financial condition, but we expect that the resulting adverse impact on our business and financial results could be material.

Perceived adverse effects on human health linked to the consumption of food derived from animals that utilize our products could cause a decline in the sales of those products.

Our business depends heavily on a healthy and growing livestock industry. Some in the public perceive risks to human health related to the consumption of food derived from animals that utilize certain of our products, including certain of our MFA products. In particular, there is increased focus in the United States, the E.U., China and other

countries on the use of antimicrobials in the livestock industry. In the United States, this focus is primarily on the use of medically important antimicrobials, which include classes that are prescribed in animal and human health and are listed in the Appendix of the FDA-CVM Guidance for Industry (GFI) 152. As defined by the FDA, medically important antimicrobials ("MIAs") include classes that are prescribed in animal and human health and are listed in the Appendix of GFI 152. Our products that contain virginiamycin, oxytetracycline or neomycin are classified by the FDA as medically important antimicrobials and are included in the GFI 152 list. The FDA announced its intention to further review the GFI 152 list and to review labeling directions of products on the GFI 152 list, which may lead to increased restrictions on the use of these products. In addition to the United States, the World Health Organization (WHO), the E.U., Australia and Canada have promulgated rating lists for antimicrobials that are used in veterinary medicine and that include certain of our products. The classification of our products as MIAs or similar listings may lead to a decline in the demand for and production of food products derived from animals that utilize our products and, in turn, demand for our products. Rules or regulations adopted by any territory that restrict the use of our products, especially our antibacterial products, which require animals or animal origin products imported into that territory to be produced under the same conditions as are required within the territory could result in a reduction or elimination of the use of our products in countries that export animals or animal origin products to such territories. Livestock producers may experience decreased demand for their products or reputational harm as a result of evolving consumer views of nutrition and health-related concerns, animal rights and other concerns. Any reputational harm to the livestock industry may also extend to companies in related industries, including us. In addition, campaigns by interest groups, activists and others with respect to perceived risks associated with the use of our products in animals, including position statements by livestock producers and their customers based on non-use of certain medicated products in livestock production, whether or not scientifically supported, could affect public perceptions and reduce the use of our products. Those adverse consumer views related to the use of one or more of our products in animals could have a material adverse effect on our financial condition and results of operations.

Restrictions on the use of antibacterials in food-producing animals may become more prevalent.

The issue of the potential transfer of antibacterial resistance from bacteria from food-producing animals to human bacterial pathogens, and the causality and impact of that transfer, are the subject of global scientific and regulatory discussion. Antibacterials refer to molecules that can be used to treat or prevent bacterial infections and are a sub-categorization of the products that make up our medicated feed additives portfolios. In some countries, this issue has led to government restrictions on the use of specific antibacterials in some food-producing animals, regardless of the route of administration (in feed, water, intra-mammary, topical, injectable or other route of administration). These restrictions include prohibitions on use of antibacterials for non-therapeutic uses, preventative use, duration of use and requiring veterinary oversight to use products. These restrictions are more prevalent in countries where animal protein is plentiful and governments are willing to take action even when there is scientific uncertainty.

Effective January 1, 2017, we voluntarily removed non-therapeutic claims from several of our antibacterial products sold in the United States, in order to align with the FDA's GFI 209 and GFI 213. The FDA objective, as described in GFI 209 and GFI 213, was to eliminate the production (non-therapeutic) uses of medically important antimicrobials administered in feed or water to food producing animals while providing for the continued use of medically important antimicrobials in food-producing animals for treatment, control and prevention of disease ("therapeutic" use) under the supervision of a veterinarian. The FDA indicated that it took this action to help preserve the efficacy of medically important antimicrobials to treat infections in humans.

Our global sales of antibacterials, anticoccidials and other products, including our Mecadox product, were $362 million, $330 million and $322 million for the years ended June 30, 2022, 2021 and 2020, respectively. We cannot predict whether concerns regarding the use of antibacterials will result in additional restrictions, expanded regulations or consumer preferences to discontinue or reduce use of antibacterials in food-producing animals, which could materially adversely affect our operating results and financial condition.

If the FDA withdraws approval of our Mecadox (carbadox) product, the loss of sales of such product could have a material adverse effect on our business, financial condition and results of operations.

Our Mecadox (carbadox) product has been approved for use in food animals in the United States for over 50 years. Certain regulatory bodies have raised concerns about the possible presence of certain residues of our carbadox product in

meat from animals that consume the product. The product was banned for use in the European Union in 1998 and has been banned in several other countries outside the United States.

In April 2016, the FDA began initial steps to withdraw approval of carbadox via a regulatory process known as a Notice of Opportunity for Hearing ("NOOH"), due to concerns that certain residues from the product may persist in animal tissues for longer than previously determined. In the years following, Phibro has continued an ongoing process of responding collaboratively and transparently to the FDA's Center for Veterinary Medicine ("CVM") inquiries and has provided extensive and meticulous research and data that confirmed the safety of carbadox. In July 2020, the FDA announced it would not proceed to a hearing on the scientific concerns raised in the 2016 NOOH, consistent with the normal regulatory procedure, but instead announced that it was withdrawing the 2016 NOOH and issuing a proposed order to review the regulatory method for carbadox. Phibro reiterated the safety of carbadox and the appropriateness of the regulatory method and offered to work with the CVM to generate additional data to support the existing regulatory method or select a suitable alternative regulatory method.

In the event the FDA continues to assert that carbadox should be removed from the market, we will argue that we are entitled to and expect to have a full evidentiary hearing on the merits before an administrative law judge. Should we be unable to successfully defend the safety of the product, the loss of carbadox sales will have an adverse effect on our financial condition and results of operations. Sales of Mecadox (carbadox) for the twelve months ended June 30, 2022, were $21 million.

See also " — We are subject to product registration and authorization regulations in many of the jurisdictions in which we operate and/or distribute our products, including the United States and member states of the European Union"; and "Business —Compliance with Government Regulations — United States — Carbadox"; and "Business — Compliance with Government Regulations — Global policy and guidance."

A material portion of our sales are generated by antibacterials and other related products.

Our medicated products business is comprised of a relatively small number of compounds and accounted for approximately 40% of net sales for the years ended June 30, 2022 and 2021. The significant loss of antibacterial or other related product sales for any reason, including product bans or restrictions, public perception, competition or any of the other risks related to such products as described in this Annual Report on Form 10-K, could have a material adverse effect on our business.

Outbreaks of animal diseases could significantly reduce demand for our products.

Sales of our food animal products could be materially adversely affected by the outbreak of disease carried by food animals, which could lead to the widespread death or precautionary destruction of food animals as well as the reduced consumption and demand for animal protein. The demand for our products could be significantly affected by outbreaks of animal diseases, and such occurrences may have a material adverse impact on the sale of our products and our financial condition and results of operations. The outbreaks of disease are beyond our control and could significantly affect demand for our products and consumer perceptions of certain meat products. An outbreak of disease could result in governmental restrictions on the import and export of chicken, pork, beef or other products to or from our customers. This could also create adverse publicity that may have a material adverse effect on our ability to sell our products successfully and on our financial condition and results of operations. In addition, outbreaks of disease carried by animals may reduce regional or global sales of particular animal-derived food products or result in reduced exports of such products, either due to heightened export restrictions or import prohibitions, which may reduce demand for our products due to reduced herd or flock sizes.

In recent years, outbreaks of African Swine Fever, primarily in China, have reduced animal populations and have reduced consumer demand for pork in the affected markets. In the past decade, there has been substantial publicity regarding H1N1, known as North American (or Swine) Influenza and, previously, H5N1, known as Highly Pathogenic Avian Influenza, in the human population. There have also been concerns relating to E. coli in beef and Salmonella in poultry and other food poisoning micro-organisms in meats and other foods. Consumers may associate human health fears with animal diseases, food, food production or food animals whether or not it is scientifically valid, which may have an adverse impact on the demand for animal protein. Occurrences of this type could significantly affect demand for animal protein, which in turn could affect the demand for our products in a manner that has a significant adverse effect on our financial condition and results of operations. Also, the outbreak of any highly contagious disease near our main

production sites could require us to immediately halt production of our products at such sites or force us to incur substantial expenses in procuring raw materials or products elsewhere.

Outbreaks of an exotic or highly contagious disease in a country where we produce our products (particularly vaccines produced at our Israeli facility) may result in other countries halting importation of our products for fear that our product may be contaminated with the exotic organism.

Our business may be negatively affected by weather conditions and the availability of natural resources.

The animal health industry and demand for many of our animal health products in a particular region are affected by changing disease pressures and by weather conditions, as usage of our products follows varying weather patterns and weather-related pressures from diseases. As a result, we may experience regional and seasonal fluctuations in our results of operations.

In addition, livestock producers depend on the availability of natural resources, including abundant rainfall to sustain large supplies of drinking water, grasslands and grain production. Their animals' health and their ability to operate could be adversely affected if they experience a shortage of fresh water due to human population growth or floods, droughts or other weather conditions. In the event of adverse weather conditions or a shortage of fresh water, livestock producers may purchase less of our products.

Adverse weather events and natural disasters may also interfere with and negatively impact operations at our manufacturing sites, research and development facilities and offices, which could have a material adverse effect on our financial condition and results of operations, especially if the impact of an event or disaster is frequent or prolonged.

Climate change could have a material adverse impact on our operations and our customers' businesses.

Our operations, and the activities of our customers, could be disrupted by climate change. The physical impact of climate change may prompt shifts in regulations or consumer preferences which in turn could have negative consequences for our and our customers' businesses. Climate change may negatively impact our customers' operations, particularly those in the livestock industry, through climate-related impacts such as increased air and water temperatures, rising water levels and increased incidence of disease in livestock. Potential physical risks from climate change may include altered distribution and intensity of rainfall, prolonged droughts or flooding, increased frequency of wildfires and other natural disasters, rising sea levels and a rising heat index, any of which could cause negative impacts to our and our customers' businesses. If such events affect our customers' businesses, they may purchase fewer of our products, and our revenues may be negatively impacted. Climate driven changes could have a material adverse effect on our financial condition and results of operations.

There has been a broad range of proposed and promulgated state, national and international regulations aimed at reducing the effects of climate change. Such regulations could result in additional costs to maintain compliance and additional income or other taxes. Climate change regulations continue to evolve, and it is not possible to accurately estimate potential future compliance costs.

The testing, manufacturing and marketing of certain of our products are subject to extensive regulation by numerous government authorities in the United States and other countries, including, but not limited to, the FDA.

Among other requirements, FDA approval of antibacterials and other medicated products, including the manufacturing processes and facilities used to produce such products, is required before such products may be marketed in the United States. Further, cross-clearance approvals are generally required for such products to be used in combination in animal feed. Similarly, marketing approval by a foreign governmental authority is typically required before such products may be marketed in a particular foreign country. In addition to approval of the product and its labeling, regulatory authorities typically require approval and periodic inspection of the manufacturing facilities. In order to obtain FDA approval of a new animal health product, we must, among other things, demonstrate to the satisfaction of the FDA that the product is safe and effective for its intended uses and that we are capable of manufacturing the product with procedures that conform to FDA's current cGMP regulations, which must be followed at all times.

Audits related to cGMP standards are typically carried out by the FDA on a two-year cycle. We are routinely subject to these inspections and respond to the FDA to address any concerns they may make in their inspectional observations (Form 483). Although it is our objective to remain in full conformance with U.S. cGMP standards, there can be no

assurance that future inspections will not raise adverse inspectional observations. Failure to comply with cGMP standards could have a material impact on our business and financial results.

The process of seeking FDA approvals can be costly, time-consuming, and subject to unanticipated and significant delays. There can be no assurance that such approvals will be granted to us on a timely basis, or at all. Any delay in obtaining or any failure to obtain FDA or foreign government approvals or the suspension or revocation of such approvals would adversely affect our ability to introduce and market medicated feed additive products and to generate product revenue. For more information on FDA and foreign government approvals and cGMP issues, see "Business — Compliance with Government Regulation."

We may experience declines in the sales volume and prices of our products as the result of the continuing trend toward consolidation of certain customer and distributor groups as well as the emergence of large buying groups.

We make a majority of our sales to integrated poultry, swine and cattle operations and to a number of regional and national feed companies, distributors, co-ops and blenders. Food animal producers, particularly, swine and poultry producers, and our distributors have seen recent consolidation in their industries. Significant consolidation of our customers and distributors may result in these groups gaining additional purchasing leverage and consequently increasing the product pricing pressures facing our business. Additionally, the emergence of large buying groups potentially could enable such groups to attempt to extract price discounts on our products. Moreover, if, as a result of increased leverage, customers require us to reduce our pricing such that our gross margins are diminished, we could decide not to sell our products to a particular customer, which could result in a decrease in our revenues. Consolidation among our customer base may also lead to reduced demand for our products and replacement of our products by the combined entity with those of our competitors. The result of these developments could have a material adverse effect on our business, financial condition and results of operations.

Our business is subject to risk based on customer exposure to rising costs and reduced customer income.

Livestock producers may experience increased feed, fuel, transportation and other key costs or may experience decreased animal protein prices or sales, including as a result of the uncertainties and economic downturn relating to the COVID-19 pandemic and the armed conflict between Russia and Ukraine. International sanctions, trade disputes and tariffs could reduce demand for our customers' products. These trends could cause deterioration in the financial condition of our livestock producer customers, potentially inhibiting their ability to purchase our products or pay us for products delivered. Our livestock producer customers may offset rising costs by reducing spending on our products, including by switching to lower-cost alternatives to our products.

Generic products may be viewed as more cost-effective than certain of our products.

We face competition from products produced by other companies, including generic alternatives to certain of our products. We depend primarily on trade secrets to provide us with competitive advantages for many of our products. The protection afforded is limited by the availability of new competitive products or generic versions of existing products that can successfully compete with our products. As a result, we may face competition from new competitive products or lower-priced generic alternatives to many of our products. Generic competitors are becoming more aggressive in terms of pricing, and generic products are an increasing percentage of overall animal health sales in certain regions. If animal health customers increase their use of new or existing generic products, our financial condition and results of operations could be materially adversely affected.

Advances in veterinary medical practices and animal health technologies could negatively affect the market for our products.

The market for our products could be impacted negatively by the introduction and/or broad market acceptance of newly developed or alternative products that address the diseases and conditions for which we sell products, including "green" or "holistic" health products or specially bred disease-resistant animals. In addition, technological breakthroughs by others may obviate our technology and reduce or eliminate the market for our products. Introduction or acceptance of such products or technologies could materially adversely affect our business, financial condition and results of operations.

The misuse or extra-label use of our products may harm our reputation or result in financial or other damages.

Our products have been approved for use under specific circumstances for, among other things, the prevention, control and/or treatment of certain diseases and conditions in specific species, in some cases subject to certain dosage levels or minimum withdrawal periods prior to the slaughter date. There may be increased risk of product liability if livestock producers or others attempt any extra-label use of our products, including the use of our products in species for which they have not been approved, or at dosage levels or periods prior to withdrawal that have not been approved. If we are deemed by a governmental or regulatory agency to have engaged in the promotion of any of our products for extra-label use, such agency could request that we modify our training or promotional materials and practices and we could be subject to significant fines and penalties. The imposition of such fines and penalties could also affect our reputation and position within the industry. Even if we were not responsible for having promoted the extra-label use, concerns could arise about the safety of the resulting meat in the human food supply. Any of these events could materially adversely affect our financial condition and results of operations.

The public perception of the safety and efficacy of certain of our animal health products may harm our reputation.

The public perception of the safety and efficacy of certain of our animal health products, whether or not these concerns are scientifically or clinically supported, may lead to product recalls, withdrawals, suspensions or declining sales as well as product liability and other claims.

Regulatory actions based on these types of safety, quality or efficacy concerns could impact all, or a significant portion of a product's sales and could, depending on the circumstances, materially adversely affect our results of operations.

In addition, we depend on positive perceptions of the safety and quality of our products, and animal health products generally, by our customers, veterinarians and end-users, and such concerns may harm our reputation. In some countries, these perceptions may be exacerbated by the existence of counterfeit versions of our products, which, depending on the legal and law enforcement recourse available in the jurisdiction where the counterfeiting occurs, may be difficult to police or stop. These concerns and the related harm to our reputation could materially adversely affect our financial condition and results of operations, regardless of whether such reports are accurate.

We are dependent on suppliers having current regulatory approvals, and the failure of those suppliers to maintain these approvals or other challenges in replacing any of those suppliers could affect our supply of materials or affect the distribution or sale of our products.

Suppliers and third-party contract manufacturers for our animal health and mineral nutrition products or the active pharmaceutical ingredients or other materials we use in our products, like us, are subject to extensive regulatory compliance. If any one of these third parties discontinues its supply to us because of changes in the regulatory environment to which such third parties are subject, significant regulatory violations or for any other reason, or an adverse event occurs at one of their facilities, the interruption in the supply of these materials could decrease sales of our affected products. In this event, we may seek to enter into agreements with third parties to purchase active ingredients, raw materials or products or to lease or purchase new manufacturing facilities. We may be unable to find a third party willing or able to provide the necessary products or facilities suitable for manufacturing pharmaceuticals on terms acceptable to us or the cost of those pharmaceuticals may be prohibitive. If we have to obtain substitute materials or products, additional regulatory approvals will likely be required, as approvals are typically specific to a single product produced by a specified manufacturer in a specified facility and there can be no assurances that such regulatory approvals will be obtained. As such, the use of new facilities also requires regulatory approvals. While we take measures where economically feasible and available to secure back-up suppliers, the continued receipt of active ingredients or products from a sole source supplier could create challenges if a sole source was interrupted. We may not be able to provide adequate and timely product to eliminate any threat of interruption of supply of our products to customers and these problems may materially adversely impact our business.

The raw materials used by us and our third-party contract manufacturers in the manufacture of our products can be subject to price fluctuations and their availability can be limited.

While the selling prices of our products tend to increase or decrease over time with the cost of raw materials, such changes may not occur simultaneously or to the same degree. The costs of certain of our significant raw materials are

subject to considerable volatility, and we generally do not engage in activities to hedge the costs of our raw materials and our third-party contract manufacturers may demand price increases related to increases in the costs of raw materials. In addition, we may be subject to new or increased tariffs on imported raw materials with limited ability to pass those increased costs through to our customers. Although no single raw material accounted for more than 5% of our cost of goods sold for the year ended June 30, 2022, volatility in raw material costs can result in significant fluctuations in our costs of goods sold of the affected products. The costs of raw materials used by our Mineral Nutrition business are particularly subject to fluctuations in global commodities markets and cost changes in the underlying commodities markets typically lead directly to a corresponding change in our revenues. Although we attempt to adjust the prices of our products to reflect significant changes in raw material costs, we may not be able to pass any increases in raw material costs through to our customers in the form of price increases. Significant increases in the costs of raw materials, if not offset by product price increases, could have a material adverse effect on our financial condition and results of operations. The supply of certain of our raw materials is dependent on third party suppliers. There is no guarantee that supply shortages or disruptions of such raw materials will not occur and the likelihood of such supply shortages and disruptions has been, and may continue to be, increased due to the COVID-19 pandemic. In addition, if any one of these third parties discontinues its supply to us, or an adverse event occurs at one of their facilities, the interruption in the supply of these materials could decrease sales of our affected products. In the event that we cannot procure necessary major raw materials from other suppliers, the occurrence of any of these may have an adverse impact on our business.

Our revenues are dependent on the continued operation of our various manufacturing facilities.

Although presently all our manufacturing facilities are considered to be in good condition, the operation of our manufacturing facilities involves many risks which could cause product interruptions, including the breakdown, failure or substandard performance of equipment, construction delays, mislabeling, shortages of materials, labor problems, power outages, political and social instability, the improper installation or operation of equipment, natural disasters, terrorist activities, the outbreak of any highly contagious diseases, such as COVID-19 in humans or African Swine Fever in swine, near our production sites and the need to comply with environmental and other directives of governmental agencies. In addition, regulatory authorities such as the FDA typically require approval and periodic inspection of the manufacturing facilities to confirm compliance with applicable regulatory requirements, and those requirements may be enforced by various means, including seizures and injunctions. Certain of our product lines are manufactured at a single facility, and certain of our product lines are manufactured at a single facility with limited capacity at a second facility, and production would not be easily transferable to another site. The occurrence of material operational problems, including but not limited to the above events, may adversely affect our financial condition and results of operations.

Our manufacturing network may be unable to meet the demand for our products or we may have excess capacity if demand for our products changes. The unpredictability of a product's regulatory or commercial success or failure, the lead time necessary to construct highly technical and complex manufacturing sites, and shifting customer demand (including as a result of market conditions or entry of branded or generic competition) increase the potential for capacity imbalances. In addition, construction of manufacturing sites is expensive, and our ability to recover costs will depend on the market acceptance and success of the products produced at the new sites, which is uncertain.

We could be subject to changes in our tax rates, the adoption of new U.S. or foreign tax legislation or exposure to additional tax liabilities.

We are subject to income taxes in the U.S. and numerous foreign jurisdictions. Changes in the relevant tax laws, regulations and interpretations could adversely affect our future effective tax rates. Modifications to key elements of the U.S. or international tax framework could have a material adverse effect on our consolidated financial statements.

Our consolidated effective tax rate is subject to potential risks that various taxing authorities may challenge the pricing of our cross-border arrangements and subject us to additional tax, adversely affecting our expected consolidated effective tax rate and our tax liability. If our effective tax rates were to increase, particularly in the U.S. or other material foreign jurisdictions, our business, financial condition and results of operations could be materially adversely affected. In addition, our tax returns and other tax filings and positions are subject to review by the Internal Revenue Service (the "IRS") and other tax authorities and governmental bodies. We regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of our provision for taxes. There can be no assurance as to the outcome of these examinations or the effects on our consolidated financial statements.

A significant portion of our operations are conducted in foreign jurisdictions and are subject to the economic, political, legal and business environments of the countries in which we do business.

Our international operations could be limited or disrupted by any of the following:

- volatility in the international financial markets;
- compliance with governmental controls;
- difficulties enforcing contractual and intellectual property rights;
- compliance with a wide variety of laws and regulations, such as the U.S. Foreign Corrupt Practices Act ("FCPA") and similar non-U.S. laws and regulations;
- compliance with foreign labor laws;
- compliance with Environmental Laws;
- burdens to comply with multiple and potentially conflicting foreign laws and regulations, including those relating to environmental, health and safety requirements;
- changes in laws, regulations, government controls or enforcement practices with respect to our business and the businesses of our customers;
- political and social instability, including crime, civil disturbance, terrorist activities, outbreaks of disease and pandemics and armed conflicts, such as the recent conflict between Russia and Ukraine;
- trade restrictions, export controls and sanctions laws and restrictions on direct investments by foreign entities, including restrictions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or an increase in trade restrictions as a result of the COVID-19 pandemic;
- government limitations on foreign ownership;
- government takeover or nationalization of business;
- changes in tax laws and tariffs;
- changes in the economic, business, competitive and regulatory environment, including changes in the value of foreign currencies relative to the U.S. dollar or high inflation;
- imposition of anti-dumping and countervailing duties or other trade-related sanctions;
- costs and difficulties and compliance risks in staffing, managing and monitoring international operations;
- corruption risk inherent in business arrangements and regulatory contacts with foreign government entities;
- longer payment cycles and increased exposure to counterparty risk; and
- additional limitations on transferring personal information between countries or other restrictions on the processing of personal information.

The multinational nature of our business subjects us to potential risks that various taxing authorities may challenge the pricing of our cross-border arrangements and subject us to additional tax, adversely impacting our effective tax rate and our tax liability.

In addition, international transactions may involve increased financial and legal risks due to differing legal systems and customs, as well as restrictions and sanctions that may be imposed on one or more persons and/or jurisdictions in which we operate, including those arising from the armed conflict between Russia and Ukraine. Compliance with these requirements may prohibit the import or export of certain products and technologies or may require us to obtain a license before importing or exporting certain products or technology. A failure to comply with any of these laws, regulations or requirements could result in civil or criminal legal proceedings, monetary or non-monetary penalties, or both, disruptions to our business, limitations on our ability to import and export products and services, and damage to our reputation. In addition, variations in the pricing of our products in different jurisdictions may result in the unauthorized importation of our products between jurisdictions. While the impact of these factors is difficult to predict, any of them could materially

adversely affect our financial condition and results of operations. Changes in any of these laws, regulations or requirements, or the political environment in a particular country, may affect our ability to engage in business transactions in certain markets, including investment, procurement and repatriation of earnings.

We are subject to product registration and authorization regulations in many of the jurisdictions in which we operate and/or distribute our products, including the United States and member states of the European Union.

We are subject to regulations related to testing, manufacturing, labeling, registration and safety analysis in order to lawfully distribute many of our products, including for example, in the United States, the federal Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act, and in the European Union, the Regulation on REACH. We are also subject to similar requirements in many of the other jurisdictions in which we operate and/or distribute our products. In some cases, such registrations are subject to periodic review by relevant authorities. Such regulations may lead to governmental restrictions or cancellations of, or refusal to issue, certain registrations or authorizations, or cause us or our customers to make product substitutions in the future. Such regulations may also lead to increased third party scrutiny and personal injury or product liability claims. Compliance with these regulations can be difficult, costly and time consuming and liabilities or costs relating to such regulations could have a material adverse effect on our business, financial condition and results of operations.

We have significant assets located outside the United States and a significant portion of our sales and earnings is attributable to operations conducted abroad that may be adversely affected by foreign currency exchange rate fluctuations and other inherent risks.

As of June 30, 2022, we had manufacturing and direct sales operations in 23 countries and sold our products in over 80 countries. Our operations outside the United States accounted for 56% and 53% of our consolidated assets as of June 30, 2022 and 2021, respectively, and 40% of our consolidated net sales for each of the years ended June 30, 2022 and 2021. Our foreign operations are subject to currency exchange fluctuations and restrictions, political instability in some countries, and uncertainty of, and governmental control over, commercial rights.

Changes in the relative values of currencies take place from time to time and could in the future adversely affect our results of operations as well as our ability to meet interest and principal obligations on our indebtedness. To the extent that the U.S. dollar fluctuates relative to the applicable foreign currency, our results are favorably or unfavorably affected. We may from time to time manage this exposure by entering into foreign currency contracts. Such contracts generally are entered into with respect to anticipated costs denominated in foreign currencies for which timing of the payment can be reasonably estimated. No assurances can be given that such hedging activities will not result in, or will be successful in preventing, losses that could have an adverse effect on our financial condition or results of operations. There are times when we do not hedge against foreign currency fluctuations and therefore are subject to the risks associated with fluctuations in currency exchange rates.

In addition, international manufacturing, sales and raw materials sourcing are subject to other inherent risks, including possible nationalization or expropriation, labor unrest, political instability, price and exchange controls, limitation on foreign participation in local enterprises, health-care regulation, export duties and quotas, domestic and international customs and tariffs, compliance with export controls and sanctions laws, the Foreign Corrupt Practices Act and other laws and regulations governing international trade, unexpected changes in regulatory environments, difficulty in obtaining distribution and support, and potentially adverse tax consequences. Although such risks have not had a material adverse effect on us in the past, these factors could have a material adverse impact on our ability to increase or maintain our international sales or on our results of operations in the future.

We have manufacturing facilities located in Israel and a portion of our net sales and earnings is attributable to products produced and operations conducted in Israel.

Our Israeli manufacturing facilities and local operations accounted for 28% and 30% of our consolidated assets, as of June 30, 2022 and 2021, and 19% and 22% of our consolidated net sales for the years ended June 30, 2022 and 2021, respectively. We maintain manufacturing facilities in Israel, which manufacture:

- anticoccidials and antimicrobials, most of which are exported;
- vaccines, a substantial portion of which are exported; and

- animal health pharmaceuticals, nutritional specialty products and trace minerals for the domestic animal industry.

A substantial portion of this production is exported from Israel to major world markets. Accordingly, our Israeli operations are dependent on foreign markets and the ability to reach those markets. Hostilities between Israel and its neighbors may hinder Israel's international trade. This, in turn, could have a material adverse effect on our business, financial condition and results of operations.

Certain countries, companies and organizations continue to participate in a boycott of Israeli firms and other companies doing business in Israel or with Israeli companies. We do not believe that the boycott has had a material adverse effect on us, but we cannot provide assurance that restrictive laws, policies or practices directed toward Israel or Israeli businesses will not have an adverse impact on our operations or expansion of our business. Our business, financial condition and results of operations in Israel may be adversely affected by factors outside of our control, such as currency fluctuations, energy shortages and other political, social and economic developments in or affecting Israel, including as a result of the impact of the COVID-19 pandemic in Israel.

We have manufacturing facilities located in Brazil and a portion of our sales and earnings is attributable to products produced and operations conducted in Brazil.

Our Brazilian manufacturing facilities and local operations accounted for 12% and 10% of our consolidated assets, as of June 30, 2022 and 2021, respectively, and 15% and 16% of our consolidated net sales for the years ended June 30, 2022 and 2021, respectively. We maintain manufacturing facilities in Brazil, which manufacture virginiamycin, semduramicin, salinomycin and nicarbazin. Our Brazilian facilities also produce Stafac, Aviax, Aviax Plus, Coxistac, Nicarb, Kamoran ®, and Terramycin granular formulations. A substantial portion of the production is exported from Brazil to major world markets. Accordingly, our Brazilian operations are dependent on foreign markets and the ability to reach those markets.

Our business, financial condition and results of operations in Brazil may be adversely affected by factors outside of our control, such as currency fluctuations, energy shortages and other political, social and economic developments in or affecting Brazil, including as a result of the impact of the COVID-19 pandemic in Brazil.

Certain of our employees are covered by collective bargaining or other labor agreements.

As of June 30, 2022, approximately 250 of our Israeli employees and 460 of our Brazilian employees were covered by collective bargaining agreements. We believe we have satisfactory relations with our employees. There can be no assurance that we will not experience a work stoppage or strike at our manufacturing facilities. A prolonged work stoppage or strike at any of our manufacturing facilities could have a material adverse effect on our business, financial condition and results of operations.

The loss of key personnel may disrupt our business and adversely affect our financial results.

Our operations and future success are dependent on the continued efforts of our senior executive officers and other key personnel. Although we have entered into employment agreements with certain executives, we may not be able to retain all of our senior executive officers and key employees. These senior executive officers and other key employees may be hired by our competitors, some of which have considerably more financial resources than we do. The loss of the services of any of our senior executive officers or other key personnel, or the inability to hire and retain qualified employees, could have a material adverse effect on our business, financial condition and results of operations.

Our R&D relies on evaluations in animals, which may become subject to bans or additional regulations.

As a company that produces animal health medicines and vaccines, evaluation of our existing and new products in animals is required in order to be able to register our products. Animal testing in certain industries has been the subject of controversy and adverse publicity. Some organizations and individuals have attempted to ban animal testing or encourage the adoption of additional regulations applicable to animal testing. To the extent that the activities of such organizations and individuals are successful, our R&D, and by extension our financial condition and results of operations, could be materially adversely affected. In addition, negative publicity about us or our industry could harm our reputation.

Our operations, properties and subsidiaries are subject to a wide variety of complex and stringent federal, state, local and foreign environmental laws and regulations.

We are subject to environmental, health and safety laws and regulations, including those governing pollution; protection of the environment; the use, management and release of hazardous materials, substances and wastes; air emissions; greenhouse gas emissions; water use, supply and discharges; the investigation and remediation of contamination; the manufacture, distribution and sale of regulated materials, including pesticides; the importing, exporting and transportation of products; and the health and safety of our employees and the public (collectively, "Environmental Laws"). See "Business — Environmental, Health and Safety."

Pursuant to Environmental Laws, certain of our subsidiaries are required to obtain and maintain numerous governmental permits, licenses, registrations, authorizations and approvals, including "RCRA Part B" hazardous waste permits, to conduct various aspects of their operations (collectively "Environmental Permits"), any of which may be subject to suspension, revocation, modification, termination or denial under certain circumstances or which may not be renewed upon their expiration for various reasons, including noncompliance. See "Business — Environmental, Health and Safety." These Environmental Permits can be difficult, costly and time consuming to obtain and may contain conditions that limit our operations. Additionally, any failure to obtain and maintain such Environmental Permits could restrict or otherwise prohibit certain aspects of our operations, which could have a material adverse effect on our business, financial condition and results of operations.

We have expended, and may be required to expend in the future, substantial funds for compliance with Environmental Laws. As recyclers of hazardous metal-containing chemical wastes, certain of our subsidiaries have been, and are likely to be, the focus of extensive compliance reviews by environmental regulatory authorities under Environmental Laws, including those relating to the generation, transportation, treatment, storage and disposal of solid and hazardous wastes under the RCRA. In the past, some of our subsidiaries have paid fines and entered into consent orders to address alleged environmental violations. See "Business — Environmental, Health and Safety." We cannot assure you that our operations or activities or those of certain of our subsidiaries, including with respect to compliance with Environmental Laws, will not result in civil or criminal enforcement actions or private actions, regulatory or judicial orders enjoining or curtailing operations or requiring corrective measures, installation of pollution control equipment or remedial measures or costs, revocation of required Environmental Permits, or fines, penalties or damages, which could have a material adverse effect on our business, financial condition and results of operations. In addition, we cannot predict the extent to which Environmental Laws, and the interpretation or enforcement thereof, may change or become more stringent in the future, each of which may affect the market for our products or give rise to additional capital expenditures, compliance costs or liabilities that could be material.

Our operations or products may impact the environment or cause or contribute to contamination or exposure to hazardous substances.

Given the nature of our current and former operations, particularly at our chemical manufacturing sites, we have incurred, are currently incurring and may in the future incur liabilities under CERCLA, or under other federal, state, local and foreign Environmental Laws related to releases of or contamination by hazardous substances, with respect to our current or former sites, adjacent or nearby third-party sites, or offsite disposal locations. See "Business — Environmental, Health and Safety." Certain Environmental Laws, including CERCLA, can impose strict, joint, several and retroactive liability for the cost of investigation and cleanup of contaminated sites on owners and operators of such sites, as well as on persons who dispose of or arrange for disposal of hazardous substances at such sites. Accordingly, we could incur liability, whether as a result of government enforcement or private claims, for known or unknown liabilities at, or caused by migration from or hazardous waste transported from, any of our current or former facilities or properties, including those owned or operated by predecessors or third parties. See "Business — Environmental, Health and Safety." Such liability could have a material adverse effect on our business, financial condition and results of operations.

The nature of our current and former operations also exposes us to the risk of claims under Environmental Laws. We could be subject to claims by environmental regulatory authorities, individuals and other third parties seeking damages for alleged personal injury, property damage and damages to natural resources resulting from hazardous substance contamination or human exposure caused by our operations, facilities or products, and there can be no assurance that material costs and liabilities will not be incurred in connection with any such claims. Our insurance may not be sufficient to cover any of these exposures, product, injury or damage claims.

Furthermore, regulatory agencies are showing increasing concern over the impact of animal health products and livestock operations on the environment. This increased regulatory scrutiny may necessitate that additional time and resources be spent to address these concerns for both new and existing products and could affect product sales and materially adversely affect our business, financial condition or results of operations.

We cannot assure you that our liabilities arising from past or future releases of, or exposure to, hazardous substances will not materially adversely affect our business, financial condition or results of operations.

We have been and may continue to be subject to claims of injury from direct exposure to certain of our products that constitute or contain hazardous substances and from indirect exposure when such substances are incorporated into other companies' products.

Because certain of our products constitute or contain hazardous substances, and because the production of certain chemicals involves the use, handling, processing, storage and transportation of hazardous substances, from time to time we are subject to claims of injury from direct exposure to such substances and from indirect exposure when such substances are incorporated into other companies' products. There can be no assurance that as a result of past or future operations, there will not be additional claims of injury by employees or members of the public due to exposure, or alleged exposure, to such substances. We are also party to a number of claims and lawsuits arising out of the normal course of business, including product liability claims and allegations of violations of governmental regulations, and face present and future claims with respect to workplace exposure, workers' compensation and other matters. In most cases, such claims are covered by insurance and, where applicable, workers' compensation insurance, subject to policy limits and exclusions; however, our insurance coverage, to the extent available, may not be adequate to protect us from all liabilities that we might incur in connection with the manufacture, sale and use of our products. Insurance is expensive and, in the future, may not be available on acceptable terms, if at all. A successful claim or series of claims brought against us in excess of our insurance coverage could have a materially adverse effect on our business, financial condition and results of operations. In addition, any claims, even if not ultimately successful, could adversely affect the marketplace's acceptance of our products.

We are subject to risks from litigation that may materially impact our operations.

We face an inherent business risk of exposure to various types of claims and lawsuits. We are involved in various legal proceedings that arise in the ordinary course of our business. Although it is not possible to predict with certainty the outcome of every pending claim or lawsuit or the range of probable loss, we believe these pending lawsuits and claims will not individually or in the aggregate have a material adverse impact on our results of operations. However, we could, in the future, be subject to various lawsuits, including intellectual property, product liability, personal injury, product warranty, environmental or antitrust claims, among others, and incur judgments or enter into settlements of lawsuits and claims that could have a material adverse effect on our results of operations in any particular period.

We are subject to risks that may not be covered by our insurance policies.

In addition to pollution and other environmental risks, we are subject to risks inherent in the animal health, mineral nutrition and performance products industries, such as explosions, fires, spills or releases. Any significant interruption of operations at our principal facilities could have a material adverse effect on us. We maintain general liability insurance, pollution legal liability insurance and property and business interruption insurance with coverage limits that we believe are adequate. Because of the nature of industry hazards, it is possible that liabilities for pollution and other damages arising from a major occurrence may not be covered by our insurance policies or could exceed insurance coverages or policy limits or that such insurance may not be available at reasonable rates in the future. Any such liabilities, which could arise due to injury or loss of life, severe damage to and destruction of property and equipment, pollution or other environmental damage or suspension of operations, could have a material adverse effect on our business.

Adverse U.S. and international economic and market conditions may adversely affect our product sales and business.

Current U.S. and international economic and market conditions are uncertain. The COVID-19 pandemic has adversely affected international economic conditions and financial markets, and have led to an economic downturn in many countries in which we operate. Our revenues and operating results may be affected by uncertain or changing

economic and market conditions, including as a result of the COVID-19 pandemic and other challenges faced in the credit markets and financial services industry.

Economic, business, political and financial disruptions from the armed conflict between Russia and Ukraine and the imposition of sanctions and business disruptions as well as inflation, could also have a material adverse effect on our operating results, financial condition, and liquidity. Certain of our customers and suppliers could be affected directly by an economic downturn and could face credit issues or cash flow problems that could give rise to payment delays, increased credit risk, bankruptcies and other financial hardships that could decrease the demand for our products or hinder our ability to collect amounts due from customers. Customers may seek lower price alternatives to our products if they are negatively impacted by poor economic conditions. Furthermore, our exposure to credit and collectability risk and cybersecurity risk is higher in certain international markets and as a result of the crisis resulting from the armed conflict between Russia and Ukraine, our ability to mitigate such risks may be limited. While we have procedures to monitor and limit exposure to credit and collectability risk and we have defensive measures in place to prevent and mitigate cyberattacks, there can be no assurance that such procedures and measures will effectively limit such risks and avoid losses.

If domestic and global economic and market conditions remain uncertain or persist or deteriorate further, we may experience material impacts on our business, financial condition and results of operations. Adverse economic conditions impacting our customers, including, among others, increased taxation, higher unemployment, lower customer confidence in the economy, higher customer debt levels, lower availability of customer credit, higher interest rates and hardships relating to declines in the stock markets, could cause purchases of meat products to decline, resulting in a decrease in purchases of our products, which could adversely affect our financial condition and results of operation. Adverse economic and market conditions could also negatively impact our business by negatively affecting the parties with whom we do business, including among others, our customers, our manufacturers and our suppliers.

We may not be able to realize the expected benefits of our investments in emerging markets.

We have been taking steps to take advantage of the rise in global demand for animal protein in emerging markets, including by expanding our manufacturing presence, sales, marketing and distribution in these markets. Failure to continue to maintain and expand our business in emerging markets could also materially adversely affect our operating results and financial condition.

Some countries within emerging markets may be especially vulnerable to periods of local, regional or global economic, political or social instability or crisis. For example, our sales in certain emerging markets have suffered from extended periods of disruption due to natural disasters. Furthermore, we have also experienced lower than expected sales in certain emerging markets due to local, regional and global restrictions on banking and commercial activities in those countries. For all these and other reasons, sales within emerging markets carry significant risks.

Modification of foreign trade policy may harm our food animal product customers.

Changes in laws, agreements and policies governing foreign trade in the territories and countries where our customers do business could negatively impact such customers' businesses and adversely affect our results of operations. A number of our customers, particularly U.S.-based food animal producers have benefited from free trade agreements, including, in the past, the North American Free Trade Agreement ("NAFTA"). The U.S., Canada and Mexico reached an agreement to replace NAFTA with the United States-Mexico-Canada Agreement (USMCA). The USMCA entered into force in July 2020 and the impact it will have on our customers remains unclear. As enacted, there are commitments with respect to biological product intellectual property rights or data protection, which may create an unfavorable environment across these three countries. This new agreement, as well as any other changes to international trade agreements or policies could harm our customers, and as a result, negatively impact our financial condition and results of operations. Additionally, in response to new U.S. tariffs affecting foreign imports, some foreign governments, including China, have instituted or are considering instituting tariffs on certain U.S. goods. While the scope and duration of these and any future tariffs remain uncertain, tariffs imposed by the U.S. or foreign governments on our customers' products, or on our products or the active pharmaceutical ingredients or other components thereof, could negatively impact our financial condition and results of operations.

Our product approval, R&D, acquisition and licensing efforts may fail to generate new products and product lifecycle developments.

Our future success depends on both our existing product portfolio, including our ability to obtain cross-clearances enabling the use of our medicated products in conjunction with other products, approval for use of our products with new species, approval for new claims for our products, approval of our products in new markets and our pipeline of new products, including new products that we may develop through joint ventures and products that we are able to obtain through license or acquisition. The majority of our R&D programs focus on product lifecycle development, which is defined as R&D programs that leverage existing animal health products by adding new species or claims, achieving approvals in new markets or creating new combinations and reformulations. We commit substantial effort, funds and other resources to expanding our product approvals and R&D, both through our own dedicated resources and through collaborations with third parties.

We may be unable to determine with accuracy when or whether any of our expanded product approvals for our existing product portfolio or any of our products now under development will be approved or launched, or we may be unable to obtain expanded product approvals or develop, license or otherwise acquire product candidates or products. In addition, we cannot predict whether any products, once launched, will be commercially successful or will achieve sales and revenues that are consistent with our expectations. The animal health industry is subject to regional and local trends and regulations and, as a result, products that are successful in some of our markets may not achieve similar success when introduced into new markets. Furthermore, the timing and cost of our R&D may increase, and our R&D may become less predictable. For example, changes in regulations applicable to our industry may make it more time-consuming and/or costly to research, test and develop products.

Products in the animal health industry are sometimes derived from molecules and compounds discovered or developed as part of human health research. We may enter into collaboration or licensing arrangements with third parties to provide us with access to compounds and other technology for purposes of our business. Such agreements are typically complex and require time to negotiate and implement. If we enter into these arrangements, we may not be able to maintain these relationships or establish new ones in the future on acceptable terms or at all. In addition, any collaboration that we enter into may not be successful, and the success may depend on the efforts and actions of our collaborators, which we may not be able to control. If we are unable to access human health-generated molecules and compounds to conduct R&D on cost-effective terms, our ability to develop new products could be limited.

The actual or purported intellectual property rights of third parties may negatively affect our business.

A third party may sue us, our distributors or licensors, or otherwise make a claim, alleging infringement or other violation of the third-party's patents, trademarks, trade dress, copyrights, trade secrets, domain names or other intellectual property rights. If we do not prevail in this type of litigation, we may be required to:

- pay monetary damages;
- obtain a license in order to continue manufacturing or marketing the affected products, which may not be available on commercially reasonable terms, or at all; or
- stop activities, including any commercial activities, relating to the affected products, which could include a recall of the affected products and/or a cessation of sales in the future.

The costs of defending an intellectual property claim could be substantial and could materially adversely affect our operating results and financial condition, even if we successfully defend such claims. We may also incur costs in connection with an obligation to indemnify a distributor, licensor or other third party. Moreover, even if we believe that we do not infringe a validly existing third-party patent, we may choose to license such patent, which would result in associated costs and obligations.

The intellectual property positions of animal health medicines and vaccines businesses frequently involve complex legal and factual questions, and an issued patent does not guarantee us the right to practice the patented technology or develop, manufacture or commercialize the patented product. We cannot be certain that a competitor or other third party does not have or will not obtain rights to intellectual property that may prevent us from manufacturing, developing or marketing certain of our products, regardless of whether we believe such intellectual property rights are valid and

enforceable or we believe we would be otherwise able to develop a more commercially successful product, which may harm our financial condition and results of operations.

If our intellectual property rights are challenged or circumvented, competitors may be able to take advantage of our R&D efforts. We are also dependent upon trade secrets, which in some cases may be difficult to protect.

Our long-term success largely depends on our ability to market technologically competitive products. We rely and expect to continue to rely on a combination of intellectual property, including patent, trademark, trade dress, copyright, trade secret and domain name protection laws, as well as confidentiality and license agreements with our employees and others, to protect our intellectual property and proprietary rights. If we fail to obtain and maintain adequate intellectual property protection, we may not be able to prevent third parties from using our proprietary technologies or from marketing products that are very similar or identical to ours. Our currently pending or future patent applications may not result in issued patents, or be approved on a timely basis, or at all. Similarly, any term extensions that we seek may not be approved on a timely basis, if at all. In addition, our issued patents may not contain claims sufficiently broad to protect us against third parties with similar technologies or products or provide us with any competitive advantage, including exclusivity in a particular product area. The scope of our patent claims also may vary between countries, as individual countries have their own patent laws. For example, some countries only permit the issuance of patents covering a novel chemical compound itself, and its first use, and thus further methods of use for the same compound, may not be patentable. We may be subject to challenges by third parties regarding our intellectual property, including claims regarding validity, enforceability, scope and effective term. The validity, enforceability, scope and effective term of patents can be highly uncertain and often involve complex legal and factual questions and proceedings. Our ability to enforce our patents also depends on the laws of individual countries and each country's practice with respect to enforcement of intellectual property rights. In addition, if we are unable to maintain our existing license agreements or other agreements pursuant to which third parties grant us rights to intellectual property, including because such agreements expire or are terminated, our financial condition and results of operations could be materially adversely affected.

Patent law changes in the United States and other countries may also weaken our ability to enforce our patent rights or make such enforcement financially unattractive. Any such changes could result in increased costs to protect our intellectual property or limit our ability to obtain and maintain patent protection for our products in these jurisdictions.

Additionally, certain foreign governments have indicated that compulsory licenses to patents may be granted in the case of national emergencies, which could diminish or eliminate sales and profits from those regions and materially adversely affect our operating results and financial condition.

Likewise, in the United States and other countries, we currently hold issued trademark registrations and have trademark applications pending, any of which may be the subject of a governmental or third-party objection, which could prevent the maintenance or issuance of the same and thus create the potential need to rebrand or relabel a product. As our products mature, our reliance on our trademarks to differentiate us from our competitors increases and as a result, if we are unable to prevent third parties from adopting, registering or using trademarks and trade dress that infringe, dilute or otherwise violate our trademark rights, our business could be materially adversely affected.

Our competitive position is also dependent upon unpatented trade secrets, which in some cases may be difficult to protect. Others may independently develop substantially equivalent proprietary information and techniques or may otherwise gain access to our trade secrets, trade secrets may be disclosed or we may not be able to protect our rights to unpatented trade secrets.

Many of our vaccine products and other products are based on or incorporate proprietary information, including proprietary master seeds and proprietary or patented adjuvant formulations. We actively seek to protect our proprietary information, including our trade secrets and proprietary know-how, by requiring our employees, consultants, other advisors and other third parties to execute confidentiality agreements upon the commencement of their employment, engagement or other relationship. Despite these efforts and precautions, we may be unable to prevent a third party from copying or otherwise obtaining and using our trade secrets or our other intellectual property without authorization and legal remedies may not adequately compensate us for the damages caused by such unauthorized use. Further, others may independently and lawfully develop substantially similar or identical products that circumvent our intellectual property by means of alternative designs or processes or otherwise.

The misappropriation and infringement of our intellectual property, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States, may occur even when we take steps to prevent it. In the future, we may be party to patent lawsuits and other intellectual property rights claims that are expensive and time consuming, and if resolved adversely, could have a significant impact on our business and financial condition. In the future, we may not be able to enforce intellectual property that relates to our products for various reasons, including licensor restrictions and other restrictions imposed by third parties, and the costs of doing so may outweigh the value of doing so, and this could have a material adverse impact on our business and financial condition.

We are subject to the U.S. Foreign Corrupt Practices Act and other anti-corruption laws or trade control laws, as well as other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, which could adversely affect our business, financial condition and results of operations.

Our operations are subject to anti-corruption laws, including the FCPA and other anti-corruption laws that apply in countries where we do business. The FCPA, UK Bribery Act and other laws generally prohibit us and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. We operate in a number of jurisdictions that pose a high risk of potential FCPA violations, and we participate in relationships with third parties whose actions could potentially subject us to liability under the FCPA or local anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the U.S. Department of Commerce's Bureau of Industry and Security, the U.S. Department of Treasury's Office of Foreign Asset Control and various non-U.S. government entities, including applicable export control regulations, economic sanctions on countries and persons, customs requirements, currency exchange regulations and transfer pricing regulations (collectively, the "Trade Control laws").

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anticorruption laws, including the FCPA or other legal requirements, including Trade Control laws. If we are not in compliance with the FCPA and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity. Likewise, any investigation of any potential violations of the FCPA other anti-corruption laws or Trade Control laws by U.S. or foreign authorities could also have an adverse impact on our reputation, business, financial condition and results of operations

Increased regulation or decreased governmental financial support for the raising, processing or consumption of food animals could reduce demand for our animal health products.

Companies in the animal health industry are subject to extensive and increasingly stringent regulations. If livestock producers are adversely affected by new regulations or changes to existing regulations, they may reduce herd sizes or become less profitable and, as a result, they may reduce their use of our products, which may materially adversely affect our operating results and financial condition. Furthermore, adverse regulations related, directly or indirectly, to the use of one or more of our products may injure livestock producers' market position. More stringent regulation of the livestock industry or our products could have a material adverse effect on our operating results and financial condition. Also, many industrial producers, including livestock producers, benefit from governmental subsidies, and if such subsidies were to be reduced or eliminated, these companies may become less profitable and, as a result, may reduce their use of our products.

Increased or decreased inventory levels at our channel distributors can lead to fluctuations in our revenues and variations in payment terms extended to our distributors can impact our cash flows.

In addition to selling our products directly to customers, we also sell to distributors who, in turn, sell our products to third parties. Inventory levels at our distributors may increase or decrease as a result of various factors, including end customer demand, new customer contracts, the influence of competition, political and socio-economic climate, contractual obligations related to minimum inventory levels, changing perceptions, including those of alternative

products, our ability to renew distribution contracts with expected terms, our ability to implement commercial strategies, regulatory restrictions, armed conflicts, unexpected customer behavior, proactive measures taken by us in response to shifting market dynamics and procedures and environmental factors beyond our control, including weather conditions or an outbreak of infectious disease such as COVID-19 or diseases carried by farm animals such as African Swine fever. These increases and decreases can lead to variations in our quarterly and annual revenues.

In addition, we have policies that govern the payment terms that we extend to our customers. From time to time, our distributors have requested exceptions to the payment term policies that we extend to them for various reasons, including consolidation amongst our distributors, changes in the buying patterns of end customers, as well as the perception of our distributors regarding the need to maintain certain inventory levels to avoid supply disruptions. Extensions of anticipated customer payment terms can impact our cash flows, liquidity and results of operations.

We have substantial debt and interest payment requirements that may restrict our future operations and impair our ability to meet our obligations under our indebtedness. Restrictions imposed by our outstanding indebtedness, including the restrictions contained in our 2021 Credit Facilities, may limit our ability to operate our business and to finance our future operations or capital needs or to engage in other business activities.

As of June 30, 2022, we had $288.8 million of outstanding indebtedness under our Term A loan (reflects the principal amount), $145.0 million of outstanding borrowings under our revolving credit facility (the "2021 Revolver," and together with the Term A loan, the "2021 Credit Facilities") and $2.5 million of outstanding letters of credit. Subject to restrictions in our 2021 Credit Facilities, we may incur significant additional indebtedness. If we and our subsidiaries incur significant additional indebtedness, the related risks that we face could intensify.

Our substantial debt may have important consequences. For instance, it could:

- make it more difficult for us to satisfy our financial obligations, including those relating to the 2021 Credit Facilities;
- require us to dedicate a substantial portion of any cash flow from operations to the payment of interest and principal due under our debt, which will reduce funds available for other business purposes, including capital expenditures and acquisitions;
- increase our vulnerability to general adverse economic and industry conditions;
- limit our flexibility in planning for or reacting to changes in our business and the industry in which we operate;
- place us at a competitive disadvantage compared with some of our competitors that may have less debt and better access to capital resources; and
- limit our ability to obtain additional financing required to fund working capital and capital expenditures and for other general corporate purposes.

Our ability to satisfy our obligations and to reduce our total debt depends on our future operating performance and on economic, financial, competitive and other factors, many of which are beyond our control. Our business may not generate sufficient cash flow, and future financings may not be available to provide sufficient net proceeds, to meet these obligations or to successfully execute our business strategy.

The terms of the 2021 Credit Facilities contain certain covenants that limit our ability and that of our subsidiaries to create liens, merge or consolidate, dispose of assets, incur indebtedness and guarantees, repurchase or redeem capital stock and indebtedness, make certain investments or acquisitions, enter into certain transactions with affiliates or change the nature of our business. As a result of these covenants and restrictions, we will be limited in how we conduct our business, and we may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. The terms of any future indebtedness we may incur could include more restrictive covenants. We may not be able to maintain compliance with the covenants in any of our debt instruments in the future and, if we fail to do so, we may not be able to obtain waivers from the lenders and/or amend the covenants.

We may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

Our ability to make scheduled payments on or refinance our debt obligations depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory and other factors beyond our control, including the impact of the COVID-19 pandemic and the armed conflict between Russia and Ukraine, and the related economic downturn on the debt markets. We may be unable to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal and interest on our indebtedness.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures, or to dispose of material assets or operations, alter our dividend policy, seek additional debt or equity capital or restructure or refinance our indebtedness. We may not be able to effect any such alternative measures on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow us to meet our scheduled debt service obligations. The instruments that govern our indebtedness may restrict our ability to dispose of assets and may restrict the use of proceeds from those dispositions and may also restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due. We may not be able to consummate those dispositions or to obtain proceeds in an amount sufficient to meet any debt service obligations when due.

In addition, we conduct our operations through our subsidiaries. Accordingly, repayment of our indebtedness will depend on the generation of cash flow by our subsidiaries, including our international subsidiaries, and their ability to make such cash available to us, by dividend, debt repayment or otherwise. Our subsidiaries may not have any obligation to pay amounts due on our indebtedness or to make funds available for that purpose. Our subsidiaries may not be able to, or may not be permitted to, make distributions to enable us to make payments in respect of our indebtedness. Each subsidiary is a distinct legal entity, and under certain circumstances, legal, tax and contractual restrictions may limit our ability to obtain cash from our subsidiaries or may subject any transfer of cash from our subsidiaries to substantial tax liabilities. In the event that we do not receive distributions from our subsidiaries, we may be unable to make required principal and interest payments on our indebtedness.

Our inability to generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, may materially adversely affect our operating results, financial condition and liquidity and our ability to satisfy our obligations under our indebtedness or pay dividends on our common stock.

We are subject to change of control provisions.

We are a party to certain contractual arrangements that are subject to change of control provisions. In this context, “change of control” is generally defined as including (a) any person or group, other than Mr. Jack C. Bendheim and his family and affiliates (the current holders of approximately 90.9% of the combined voting power of all classes of our outstanding common stock), becoming the beneficial owner of more than 50% of the total voting power of our stock, and (b) a change in any twelve month period in the majority of the members of the Board that is not approved by Mr. Bendheim and/or his family and affiliates or by the majority of directors in office at the start of such period.

Mr. Bendheim and his family and affiliates may choose to dispose of part or all of their stakes in us and/or may cease to exercise the current level of control they have over the appointment and removal of members of our Board. Any such changes may trigger a “change of control” event that could result in us being forced to repay the 2021 Credit Facilities or lead to the termination of a significant contract to which we are a party. If any such event occurs, this may negatively affect our financial condition and operating results. In addition, we may not have sufficient funds to finance repayment of any of such indebtedness upon any such “change in control.”

We depend on sophisticated information technology and infrastructure.

We rely on various information systems to manage our operations, and we increasingly depend on third parties and applications on virtualized, or “cloud,” infrastructure to operate and support our information technology systems. These third parties include large established vendors as well as small, privately owned companies. Failure by these providers to adequately service our operations or a change in control or insolvency of these providers could have an adverse effect on our business, which in turn may materially adversely affect our business, financial condition or results of operations.

We may be required to write down goodwill or identifiable intangible assets.

Under generally accepted accounting principles in the United States ("GAAP"), if we determine goodwill or identifiable intangible assets are impaired, we will be required to write down these assets and record a non-cash impairment charge. As of June 30, 2022, we had goodwill of $53.2 million and identifiable intangible assets, less accumulated amortization, of $63.9 million. Identifiable intangible assets consist primarily of developed technology rights and patents, customer relationships, distribution agreements and trade names and trademarks.

Determining whether an impairment exists and the amount of the potential impairment involves quantitative data and qualitative criteria that are based on estimates and assumptions requiring significant management judgment. Future events or new information may change management's valuation of goodwill or an intangible asset in a short amount of time. The timing and amount of impairment charges recorded in our consolidated statements of operations and write-downs recorded in our consolidated balance sheets could vary if management's conclusions change. Any impairment of goodwill or identifiable intangible assets could have a material adverse effect on our financial condition and results of operations.

We may be unable to adequately protect our customers' privacy or we may fail to comply with privacy laws.

The protection of customer, employee and company data is critical and the regulatory environment surrounding information security, storage, use, processing, disclosure and privacy is demanding, with the frequent imposition of new and changing requirements. In addition, our customers expect that we will adequately protect their personal information. Any actual or perceived significant breakdown, intrusion, interruption, cyber-attack or corruption of customer, employee or company data or our failure to comply with federal, state, local and foreign privacy laws could damage our reputation and result in lost sales, fines and lawsuits. Despite our considerable efforts and technology to secure our computer network, security could be compromised, confidential information could be misappropriated or system disruptions could occur. Any actual or perceived access, disclosure or other loss of information or any significant breakdown, intrusion, interruption, cyber-attack or corruption of customer, employee or company data or our failure to comply with federal, state, local and foreign privacy laws or contractual obligations with customers, vendors, payment processors and other third parties, could result in legal claims or proceedings, liability under laws or contracts that protect the privacy of personal information, regulatory penalties, disruption of our operations and damage to our reputation, all of which could materially adversely affect our business, revenue and competitive position.

We may be subject to information technology system failures, network disruptions and breaches in data security.

We are increasingly dependent upon information technology systems and infrastructure to conduct critical operations and generally operate our business, which includes using information technology systems to process, transmit and store electronic information in our day-to-day operations, including customer, employee and company data. The COVID-19 pandemic and related quarantines, shelter-in-place and "social distancing" requirements, travel restrictions and other similar government orders, have resulted in a substantial portion of our employees working remotely and have increased our dependence on tools that facilitate employees working from home and gaining remote access to our information technology systems. As a result, any disruption to our information technology systems, our industrial machinery, software used in our manufacturing facilities, firmware or software embedded in our equipment or machinery, including from cyber incidents, could have a material adverse effect on our business. The increased use of these tools could also make our information technology systems more vulnerable to breaches of data security and cybersecurity attacks. The size and complexity of our computer systems make them potentially vulnerable to breakdown, malicious intrusion and random attack. We also store certain information with third parties. Our information systems and those of our third-party vendors are subjected to computer viruses or other malicious codes, unauthorized access attempts, and cyber, phishing or ransomware attacks and also are vulnerable to an increasing threat of continually evolving cybersecurity risks and external hazards. Disruption, degradation, or manipulation of these systems and infrastructure through intentional or accidental means could impact key business processes. Cyber-attacks against the Company's systems and infrastructure could result in exposure of confidential information, the modification of critical data and/or the failure of critical operations. Likewise, improper or inadvertent employee behavior, including data privacy breaches by employees and others with permitted access to our systems may pose a risk that sensitive data may be exposed to unauthorized persons or to the public. Any such breach could compromise our networks, and the information stored therein could be accessed, publicly disclosed, lost or stolen. Such attacks could result in our intellectual property and other confidential information being lost or stolen, disruption of our operations and other negative consequences, such as increased costs for security measures or remediation costs, and diversion of management attention. Although the aggregate impact on the Company's operations and financial condition has not been material to date, the Company has been the target of events of this nature and expects them to continue as cyber-attacks are becoming more sophisticated and frequent, and the techniques used in such attacks change rapidly. The Company monitors its data, information technology and personnel usage of Company systems to reduce these risks and continues to do so on an ongoing basis for any current or potential threats.

If any of our operational technologies, software or hardware or other control systems are compromised, fail or have other significant shortcomings, it could disrupt our business, require us to incur substantial additional expenses or result in potential liability or reputational damage. While we have invested in protection of data and information technology, there can be no assurance that our efforts will prevent such breakdowns, cybersecurity attacks or breaches in our systems that could cause reputational damage, business disruption and legal and regulatory costs; could result in third-party claims; could result in compromise or misappropriation of our intellectual property, trade secrets and sensitive information; and could otherwise adversely affect our business and financial results.

Risks Related to Ownership of Our Class A Common Stock

Our multiple class structure and the concentration of our voting power with certain of our stockholders will limit your ability to influence corporate matters, and conflicts of interest between certain of our stockholders and us or other investors could arise in the future.

As of August 19, 2022, BFI Co., LLC ("BFI") beneficially owns 59,480 shares of our Class A common stock and 20,166,034 shares of our Class B common stock, which together represent approximately 90.9% of the combined voting power of all classes of our outstanding common stock. As of August 19, 2022, our other stockholders, collectively own interests representing approximately 9.1% of the combined voting power of all classes of our outstanding common stock. Because of our multiple class structure and the concentration of voting power with BFI, BFI will continue to be able to control all matters submitted to our stockholders for approval for so long as BFI holds common stock representing greater than 50% of the combined voting power of all classes of our outstanding common stock. BFI will therefore have significant influence over management and affairs and control the approval of all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of the Company or its assets, for the foreseeable future.

We are classified as a "controlled company" and, as a result, we qualify for, and intend to rely on, exemptions from certain corporate governance requirements. You will not have the same protections afforded to stockholders of companies that are subject to such requirements.

BFI controls a majority of the combined voting power of all classes of our outstanding common stock. As a result, we are a "controlled company" within the meaning of the Nasdaq corporate governance standards. Under Nasdaq rules, a company of which more than 50% of the voting power is held by an individual, group or another company is a "controlled company" and may elect not to comply with certain corporate governance requirements, including:

- the requirement that a majority of the Board consists of independent directors;
- the requirement that we have a nominating and corporate governance committee and that it is composed entirely of independent directors;
- the requirement that we have a compensation committee and that it is composed entirely of independent directors; and
- the requirement for an annual performance evaluation of the nominating and corporate governance and compensation committees.

We utilize and intend to continue to utilize these exemptions. As a result, while we currently have a majority of independent directors:

- we may not have a majority of independent directors in the future;
- we will not have a nominating and corporate governance committee;
- our compensation committee will not consist entirely of independent directors; and
- we will not be required to have an annual performance evaluation of the compensation committee.

Accordingly, you will not have the same protections afforded to stockholders of companies that are subject to all of the Nasdaq corporate governance requirements.

Our stock price may be volatile or may decline regardless of our operating performance.

The market price of our Class A common stock may fluctuate significantly in response to a number of factors, many of which we cannot control, including those described under "— Risk Factors Relating to Our Business" and the following:

- changes in financial estimates by any securities analysts who follow our Class A common stock, our failure to meet these estimates or failure of those analysts to initiate or maintain coverage of our Class A common stock;
- downgrades by any securities analysts who follow our Class A common stock;
- future sales of our Class A common stock by our officers, directors and significant stockholders;
- market conditions or trends in our industry or the economy as a whole and, in particular, in the animal health industry;
- investors' perceptions of our prospects;
- announcements by us or our competitors of significant contracts, acquisitions, joint ventures or capital commitments; and
- changes in key personnel.

In addition, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. The recent COVID-19 pandemic has contributed to significant volatility in stock and financial markets in the United States and globally. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were involved in securities litigation, we could incur substantial costs, and our resources and the attention of management could be diverted from our business.

Our majority stockholder has the ability to control significant corporate activities and our majority stockholder's interests may not coincide with yours.

As of August 19, 2022, approximately 90.9% of the combined voting power of all classes of our outstanding common stock is held by BFI. As a result of its ownership, so long as it holds a majority of the combined voting power of all classes of our outstanding common stock, BFI will have the ability to control the outcome of matters submitted to a vote of stockholders and, through our Board of Directors, the ability to control decision-making with respect to our business direction and policies. Matters over which BFI, directly or indirectly, exercises control include:

- the election of our Board of Directors and the appointment and removal of our officers;
- mergers and other business combination transactions, including proposed transactions that would result in our stockholders receiving a premium price for their shares;
- other acquisitions or dispositions of businesses or assets;
- incurrence of indebtedness and the issuance of equity securities;
- repurchase of stock and payment of dividends; and
- the issuance of shares to management under our equity incentive plans.

Even if BFI's ownership of our shares falls below a majority of the combined voting power of all classes of our outstanding common stock, it may continue to be able to influence or effectively control our decisions.

Future sales of our Class A common stock, or the perception in the public markets that these sales may occur, may depress our stock price.

Sales of substantial amounts of our Class A common stock in the public market, or the perception that these sales could occur, could adversely affect the price of our Class A common stock and could impair our ability to raise capital through the sale of additional shares. In addition, subject to certain restrictions on converting Class B common stock into Class A common stock, all of our outstanding shares of Class B common stock may be converted into Class A common stock and sold in the public market by existing stockholders. As of August 19, 2022, we had 20,337,574 shares of Class A common stock and 20,166,034 shares of Class B common stock outstanding.

BFI, which holds all of our outstanding Class B common stock, has the right to require us to register the sales of their shares under the Securities Act under the terms of an agreement between us and the holders of these securities. In the future, we may also issue our securities in connection with investments or acquisitions. The amount of shares of our Class A common stock issued in connection with an investment or acquisition could constitute a material portion of our then-outstanding shares of our Class A common stock.

Anti-takeover provisions in our charter documents and Delaware law might discourage or delay acquisition attempts for us that you might consider favorable.

Our certificate of incorporation and bylaws contain provisions that may make the acquisition of the Company more difficult without the approval of our Board of Directors. These provisions:

- authorize the issuance of undesignated preferred stock, the terms of which may be established and the shares of which may be issued without stockholder approval, and which may include super voting, special approval, dividend, or other rights or preferences superior to the rights of the holders of Class A common stock;
- prohibit, at any time after BFI and its affiliates cease to hold at least 50% of the combined voting power of all classes of our outstanding common stock, stockholder action by written consent, without the express prior consent of the Board of Directors;
- provide that the Board of Directors is expressly authorized to make, alter or repeal our amended and restated bylaws;
- establish advance notice requirements for nominations for elections to our Board of Directors or for proposing matters that can be acted upon by stockholders at stockholder meetings; and

- establish a classified Board of Directors, as a result of which our Board of Directors will be divided into three classes, with each class serving for staggered three-year terms, which prevents stockholders from electing an entirely new Board of Directors at an annual meeting; and require, at any time after BFI and its affiliates cease to hold at least 50% of the combined voting power of all classes of our outstanding common stock, the approval of holders of at least three quarters of the combined voting power of all classes of our outstanding common stock for stockholders to amend the amended and restated bylaws or amended and restated certificate of incorporation.

These anti-takeover provisions and other provisions under Delaware law could discourage, delay or prevent a transaction involving a change in control of the Company, even if doing so would benefit our stockholders. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing and to cause us to take other corporate actions you desire.

Our certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our certificate of incorporation provides that, subject to limited exceptions, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our by-laws, or (iv) any other action asserting a claim against us that is governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our certificate of incorporation described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition and results of operations.

Provisions of our certificate of incorporation could have the effect of preventing us from having the benefit of certain business opportunities that we would otherwise be entitled to pursue.

Our certificate of incorporation provides that BFI and its affiliates are not required to offer corporate opportunities of which they become aware to us and could, therefore, offer such opportunities instead to other companies including affiliates of BFI. In the event that BFI obtains business opportunities from which we might otherwise benefit but chooses not to present such opportunities to us, these provisions of our restated certificate of incorporation could have the effect of preventing us from pursuing transactions or relationships that would otherwise be in the best interests of our stockholders.

We may not pay cash dividends in the future and, as a result, you may not receive any return on investment unless you are able to sell your Class A common stock for a price greater than your initial investment.

We have a paid a quarterly dividend since September 2014 on our Class A and Class B common stock and our Board of Directors has declared a cash dividend of $0.12 per share on our Class A common stock and Class B common stock that is payable September 28, 2022. Any determination to pay dividends in the future will be at the discretion of our Board of Directors and will depend upon results of operations, financial condition, contractual restrictions and our ability to obtain funds from our subsidiaries to meet our obligations. Our 2021 Credit Facilities permit us to pay distributions to stockholders out of available cash subject to certain annual limitations and so long as no default or event of default under the 2021 Credit Facilities shall have occurred and be continuing at the time such distribution is declared. Realization of a gain on your investment will depend on the appreciation of the price of our Class A common stock.

General Risk Factors

We face competition in each of our markets from a number of large and small companies, some of which have greater financial, R&D, production and other resources than we have.

Many of our products face competition from alternative or substitute products. We are engaged in highly competitive industries and, with respect to all of our major products, face competition from a substantial number of global and regional competitors. We believe many of our competitors are conducting R&D activities in areas served by our products and in areas in which we are developing products. Some competitors have greater financial, R&D, production and other resources than we have. Some of our principal competitors include Boehringer Ingelheim International GmbH, Ceva Santé Animale, Elanco Animal Health Incorporated, Huvepharma Inc., Merck & Co., Inc. (Merck Animal Health and MSD Animal Health), Southeastern Minerals, Inc. and Zoetis Inc. To the extent these companies or new entrants offer comparable animal health, mineral nutrition or performance products at lower prices, our business could be adversely affected. New entrants could substantially reduce our market share or render our products obsolete. Furthermore, many of our competitors have relationships with key distributors and, because of their size, have the ability to offer attractive pricing incentives, which may negatively impact or hinder our relationships with these distributors.

In certain countries, because of our size and product mix, we may not be able to capitalize on changes in competition and pricing as fully as our competitors. In recent years, there have been new generic medicated products introduced to the livestock industry, particularly in the United States.

There has been and likely will continue to be consolidation in the animal health market, which could strengthen our competitors. Our competitors can be expected to continue to improve the formulation and performance of their products and to introduce new products with competitive price and performance characteristics. There can be no assurance that we will have sufficient resources to maintain our current competitive position or market share. We also face competitive pressures arising from, among other things, more favorable safety and efficacy product profiles, limited demand growth or a significant number of additional competitive products being introduced into a particular market, price reductions by competitors, the ability of competitors to capitalize on their economies of scale and the ability of competitors to produce or otherwise procure animal health products at lower costs than us. To the extent that any of our competitors are more successful with respect to any key competitive factor, or we are forced to reduce, or are unable to raise, the price of any of our products in order to remain competitive, our business, financial condition and results of operations could be materially adversely affected.

Failure to comply with requirements to design, implement and maintain effective internal controls could have a material adverse effect on our business and stock price.

As a public company, we have significant requirements for enhanced financial reporting and internal controls. The process of designing and implementing effective internal controls is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. If we are unable to establish or maintain appropriate internal financial reporting controls and procedures, it could cause us to fail to meet our reporting obligations on a timely basis, result in material misstatements in our consolidated financial statements and harm our operating results. In addition, we are required, pursuant to Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting and a statement that our auditors have issued an attestation report on the effectiveness of our internal controls. Testing and maintaining internal controls may divert our management's attention from other matters that are important to our business. We may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 or our independent registered public accounting firm may not issue an unqualified opinion. We have had material weaknesses in our internal controls over financial reporting in prior years, including three material weaknesses identified for the year ended June 30, 2020. While we have remediated such material weaknesses identified in prior years, we cannot provide any assurance we will not identify material weaknesses in the future. If we suffer deficiencies or material weaknesses in our internal controls, we may be unable to report financial information in a timely and accurate manner and it could result in a material misstatement of our annual or interim financial statements that would not be prevented or detected on a timely basis, which could cause investors to lose confidence in our financial reporting, negatively affect the trading price of our common stock and could cause a

default under the agreements governing our indebtedness. If either we are unable to conclude that we have effective internal control over financial reporting or our independent registered public accounting firm is unable to provide us with an unqualified opinion, investors could lose confidence in our reported financial information, which could have a material adverse effect on the trading price of our stock.

As a public company, we are subject to financial and other reporting and corporate governance requirements that may be difficult for us to satisfy and may divert management's attention from our business.

As a public company, we are required to file annual and quarterly reports and other information pursuant to the Exchange Act with the SEC. We are required to ensure that we have the ability to prepare consolidated financial statements that comply with SEC reporting requirements on a timely basis. We are also subject to other reporting and corporate governance requirements, including the applicable stock exchange listing standards and certain provisions of the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder, which impose significant compliance obligations upon us.

As a public company, we are required to commit significant resources and management time and attention to these requirements, which cause us to incur significant costs and which may place a strain on our systems and resources. As a result, our management's attention might be diverted from other business concerns. Compliance with these requirements place significant demands on our legal, accounting and finance staff and on our accounting, financial and information systems and increase our legal and accounting compliance costs as well as our compensation expense as we have been or may be required to hire additional accounting, tax, finance and legal staff with the requisite technical knowledge.

We may not be able to expand through acquisitions or integrate successfully the products, services and personnel of acquired businesses.

From time to time, we may make selective acquisitions to expand our range of products and services and to expand the geographic scope of our business. However, we may be unable to identify suitable targets, and competition for acquisitions may make it difficult for us to consummate acquisitions on acceptable terms or at all. We may not be able to locate any complementary products that meet our requirements or that are available to us on acceptable terms or we may not have sufficient capital resources to consummate a proposed acquisition. In addition, assuming we identify suitable products or partners, the process of effectively entering into these arrangements involves risks that our management's attention may be diverted from other business concerns. Further, if we succeed in identifying and consummating appropriate acquisitions on acceptable terms, we may not be able to integrate successfully the products, services and personnel of any acquired businesses on a basis consistent with our current business practice. In particular, we may face greater than expected costs, time and effort involved in completing and integrating acquisitions and potential disruption of our ongoing business. Furthermore, we may realize fewer, if any, synergies than envisaged. Our ability to manage acquired businesses may also be limited if we enter into joint ventures or do not acquire full ownership or a controlling stake in the acquired business. In addition, continued growth through acquisitions may significantly strain our existing management and operational resources. As a result, we may need to recruit additional personnel, particularly at the level below senior management, and we may not be able to recruit qualified management and other key personnel to manage our growth. Moreover, certain transactions could adversely impact earnings as we incur development and other expenses related to the transactions and we could incur debt to complete these transactions. Debt instruments could contain contractual commitments and covenants that could adversely affect our cash flow and our ability to operate our business, financial condition and results of operations.

We may not successfully implement our business strategies or achieve expected gross margin improvements.

We are pursuing and may continue to pursue strategic initiatives that management considers critical to our long-term success, including, but not limited to, increasing sales in emerging markets, base revenue growth through new product development and value-added product lifecycle development; improving operational efficiency through manufacturing efficiency improvement and other programs; and expanding our complementary products and services. There are significant risks involved with the execution of these types of initiatives, including significant business, economic and competitive uncertainties, many of which are outside of our control. Accordingly, we cannot predict whether we will succeed in implementing these strategic initiatives. It could take several years to realize the anticipated benefits from these initiatives, if any benefits are achieved at all. We may be unable to achieve expected gross margin improvements

on our products or technologies. Additionally, our business strategy may change from time to time, which could delay our ability to implement initiatives that we believe are important to our business.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The following table lists our material properties:

Business Segment(s)	Location	Owned/ Leased	Approx. sq. Footage	Purpose(s)
Animal Health	Buenos Aires, Argentina	Owned	43,000	Manufacturing and Administrative
Animal Health	Braganca Paulista, Brazil	Owned	50,000	Manufacturing and Administrative
Animal Health	Guarulhos, Brazil	Owned	1,294,000	Manufacturing, Sales, Premixing, Research and Administrative
Animal Health	Heliópolis, Brazil	Owned	15,000	Manufacturing and Administrative
Animal Health	Sligo, Ireland	Owned	45,000	Manufacturing
Animal Health	Beit Shemesh, Israel	Owned/ land lease	79,000	Manufacturing and Research
Animal Health	Neot Hovav, Israel	Owned/land lease	140,000	Manufacturing and Research
Animal Health	Petach Tikva, Israel	Owned	60,000	Manufacturing
Animal Health	Sarasota, Florida	Leased	93,000	Manufacturing, Sales, Research and Administrative
Animal Health	Chillicothe, Illinois	Owned	19,000	Manufacturing
Animal Health	St. Paul, Minnesota	Leased	5,000	Research
Animal Health	Omaha, Nebraska	Owned	43,000	Manufacturing, Sales and Research
Animal Health	Corvallis, Oregon	Owned	5,000	Research
Animal Health	State College, Pennsylvania	Owned	13,000	Research
Animal Health and Mineral Nutrition	Quincy, Illinois	Owned	306,000	Manufacturing, Sales, Research and Administrative
Mineral Nutrition	Omaha, Nebraska	Owned	84,000	Manufacturing
Performance Products	Santa Fe Springs, California	Owned	108,000	Manufacturing
Corporate	Teaneck, New Jersey	Leased	50,000	Corporate and Administrative

Item 3. Legal Proceedings

We are from time to time subject to claims and litigation arising in the ordinary course of business. These claims and litigation may include, among other things, allegations of violation of United States and foreign competition law, labor laws, consumer protection laws, data protection laws and Environmental Laws and regulations, as well as claims or litigation relating to product liability, intellectual property, securities, breach of contract and tort. We operate in multiple jurisdictions and, as a result, a claim in one jurisdiction may lead to claims or regulatory penalties in other jurisdictions.

We do not believe that the ultimate resolution of existing claims and litigation will have a material adverse effect on our financial position, results of operations, liquidity or capital resources. However, one or more unfavorable outcomes in any claim or litigation against us could have a material adverse effect for the period in which they are resolved. In

addition, regardless of their merits or their ultimate outcomes, such matters are costly, divert management's attention and may materially adversely affect our reputation, even if resolved in our favor.

See "Notes to Consolidated Financial Statements — Commitments and Contingencies" in Part II. Item 8 on this Annual Report on Form 10-K, which is incorporated herein by reference, for further information on our legal proceedings. For an additional discussion of certain risks associated with legal proceedings see "Risk Factors" above.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information for Common Stock

Our Class A common stock is traded on Nasdaq under the trading symbol "PAHC." Our Class B common stock is not listed or traded on any stock exchange. At June 30, 2022, there were 20,337,574 shares of Class A common stock outstanding.

During the fiscal year ended June 30, 2022, we did not sell any unregistered securities nor did we purchase any of our equity securities.

Holders of Record

As of August 19, 2022, there were 20,337,574 shares of our Class A common stock outstanding, which were held by one stockholder of record, not including beneficial owners of shares registered in nominee or street name. As of August 19, 2022, there were 20,166,034 shares of our Class B common stock outstanding, which were held by one stockholder of record. Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. Information about 5% beneficial owners of our common stock is incorporated by reference from the discussion in our 2022 Proxy Statement under the heading *Security Ownership of Certain Beneficial Owners and Management*.

Dividend Policy

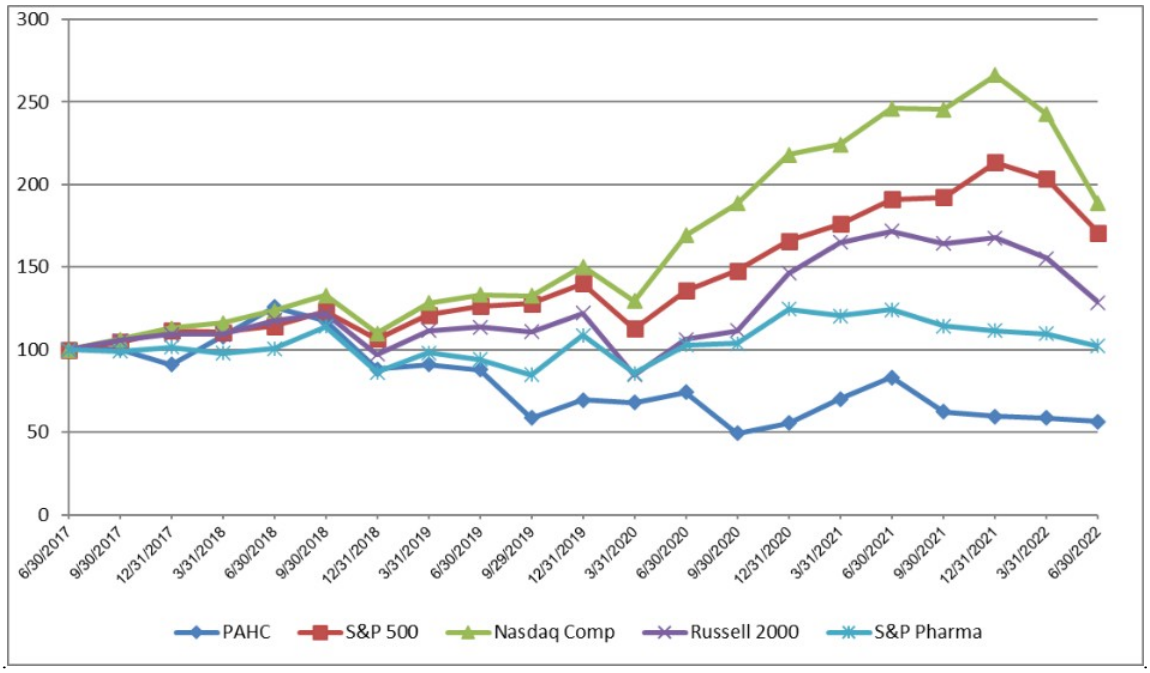
We intend to pay regular quarterly dividends to holders of our Class A and Class B common stock out of assets legally available for this purpose. Any future determination to pay dividends is subject to review and approval by our Board of Directors and will depend upon our results of operations, financial condition, capital requirements, our ability to obtain funds from our subsidiaries and other factors that our Board of Directors deem relevant. Additionally, the terms of our current and any future agreements governing our indebtedness could limit our ability to pay dividends or make other distributions.

Stock Performance Graph

This performance graph is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act.

The following graph shows a comparison from June 30, 2017 through June 30, 2022, of the cumulative stockholder return of our Class A common stock, the S&P 500 Index, the Nasdaq Composite Index, the Russell 2000 Index and the S&P Pharmaceuticals Index. The graph assumes that $100 was invested in our Class A common stock and each of the aforementioned indexes at the market close on June 30, 2017, and assumes dividends, if any, are reinvested. The stock

price performance shown on the graph is not necessarily indicative of future stock price performance, and we do not make any projections of future stockholder returns.



Item 6. (Reserved)

Not applicable

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Introduction

Our management's discussion and analysis of financial condition and results of operations ("MD&A") is provided to assist readers in understanding our performance, as reflected in the results of our operations, our financial condition and our cash flows. The following discussion summarizes the significant factors affecting our consolidated operating results, financial condition, liquidity and cash flows as of and for the periods presented below. This MD&A should be read in conjunction with our consolidated financial statements and related notes thereto included under the section entitled "Financial Statements and Supplementary Data." Our future results could differ materially from our historical performance as a result of various factors such as those discussed in "Risk Factors" and "Forward-Looking Statements and Risk Factors Summary."

Overview of our business

Phibro Animal Health Corporation is a leading global diversified animal health and mineral nutrition company. We develop, manufacture and market a broad range of products for food and companion animals including poultry, swine, beef and dairy cattle, aquaculture and dogs. Our products help prevent, control and treat diseases, and support nutrition

to help improve animal health and well-being. In addition to animal health and mineral nutrition products, we manufacture and market specific ingredients for use in the personal care, industrial chemical and chemical catalyst industries. We sell approximately 780 product lines in over 80 countries to approximately 3,790 customers.

Factors affecting our performance

Armed Conflict between Russia and Ukraine

In response to the armed conflict between Russia and Ukraine that began in February 2022, we and our employees have provided support to Ukraine in the form of monetary donations, free product and humanitarian services. Our limited intent for the Russian market is to continue to provide medicines and vaccines, and related regulatory and technical support, to help existing customers combat disease challenges in the production of food animals on their farms. We have no production or direct distribution operations and no planned investments in Russia.

Since the conflict began, the United States and other North Atlantic Treaty Organization ("NATO") member states, as well as non-member states, announced targeted economic sanctions on Russia, including certain Russian citizens and enterprises. The continuation of the conflict may trigger additional economic and other sanctions, as well as broader military conflict. The potential impacts of any resulting bans, sanctions, boycotts or broader military conflicts on our business is uncertain at the current time due to the fluid nature of the conflict. The potential impacts could include supply chain and logistics disruptions, macroeconomic impacts resulting from the exclusion of Russian financial institutions from the global banking system, volatility in foreign exchange rates and interest rates, inflationary pressures on raw materials and energy as well as heightened cybersecurity threats. Our annual sales to Russia and Ukraine represent approximately 1% of consolidated net sales.

We cannot know if the conflict could escalate and result in broader economic and security concerns that could adversely affect our business, financial condition, or results of operations.

Effects of the COVID-19 pandemic

The global food and animal production industry has experienced demand disruption, production impacts, price volatility and currency volatility in international markets due to the COVID-19 pandemic. The situation surrounding the COVID-19 pandemic remains fluid. We are unable to predict the future impact of COVID-19 on the economies where we manufacture and/or sell our products. We continue to evaluate the nature and extent of the effects of COVID-19 on our business, consolidated results of operations, financial condition and liquidity. For additional considerations and risks associated with COVID-19 on our business, please refer to Item 1A. "Risk Factors."

Industry growth

We believe global population growth, the growth of the global middle class and the productivity improvements needed due to limitations of arable land and water supplies have supported and will continue to support growth of the animal health industry.

Regulatory Developments

Our business depends heavily on a healthy and growing livestock industry. Some in the public perceive risks to human health related to the consumption of food derived from animals that utilize certain of our products, including certain of our MFA products. In particular, there is increased focus, in the United States and other countries, on the use of medically important antimicrobials. As defined by the FDA, medically important antimicrobials ("MIAs") include classes that are prescribed in animal and human health and are listed in the Appendix of the FDA-CVM Guidance for Industry (GFI) 152. Our products that contain virginiamycin, oxytetracycline or neomycin are classified by the FDA as medically important antimicrobials. In addition to the United States, the World Health Organization (WHO), the E.U., Australia and Canada have promulgated rating lists for antimicrobials that are used in veterinary medicine and that include certain of our products.

The classification of our products as MIAs or similar listings may lead to a decline in the demand for and production of food products derived from animals that utilize our products and, in turn, demand for our products. Livestock producers may experience decreased demand for their products or reputational harm as a result of evolving consumer views of nutrition and health-related concerns, animal rights and other concerns. Any reputational harm to the livestock industry may also extend to companies in related industries, including us. In addition, campaigns by interest groups,

activists and others with respect to perceived risks associated with the use of our products in animals, including position statements by livestock producers and their customers based on non-use of certain medicated products in livestock production, whether or not scientifically-supported, could affect public perceptions and reduce the use of our products. Those adverse consumer views related to the use of one or more of our products in animals could have a material adverse effect on our financial condition and results of operations.

In April 2016, the FDA began initial steps to withdraw approval of carbadox (the active ingredient in our Mecadox product) via a regulatory process known as a Notice of Opportunity for Hearing ("NOOH"), due to concerns that certain residues from the product may persist in animal tissues for longer than previously determined. In the years following, Phibro has continued an ongoing process of responding collaboratively and transparently to the FDA's Center for Veterinary Medicine ("CVM") inquiries and has provided extensive and meticulous research and data that confirmed the safety of carbadox. In July 2020, the FDA announced it would not proceed to a hearing on the scientific concerns raised in the 2016 NOOH, consistent with the normal regulatory procedure, but instead announced that it was withdrawing the 2016 NOOH and issuing a proposed order to review the regulatory method for carbadox. Phibro reiterated the safety of carbadox and the appropriateness of the regulatory method and offered to work with the CVM to generate additional data to support the existing regulatory method or select a suitable alternative regulatory method.

In the event the FDA continues to assert that carbadox should be removed from the market, we will argue that we are entitled to and expect to have a full evidentiary hearing on the merits before an administrative law judge. Should we be unable to successfully defend the safety of the product, the loss of carbadox sales will have an adverse effect on our financial condition and results of operations. Sales of Mecadox (carbadox) for the twelve months ended June 30, 2022, were $21 million. As of the date of this Annual Report on Form 10-K, Mecadox continues to be available for use by swine producers.

See also "Business — Compliance with Government Regulations — United States — Carbadox"; and "Business — Compliance with Government Regulations — Global policy and guidance."

Our global sales of antibacterials, anticoccidials and other products were $361 million, $330 million and $322 million for the years ended June 30, 2022, 2021 and 2020, respectively.

Competition

The animal health industry is highly competitive. We believe many of our competitors are conducting R&D activities in areas served by our products and in areas in which we are developing products. Our competitors include specialty animal health businesses and the animal health businesses of large pharmaceutical companies. In addition to competition from established participants, there could be new entrants to the animal health medicines and vaccines industry in the future. Principal methods of competition vary depending on the region, species, product category or individual products, including reliability, reputation, quality, price, service and promotion to veterinary professionals and livestock producers.

Foreign exchange

We conduct operations in many areas of the world, involving transactions denominated in a variety of currencies. For the year ended June 30, 2022, we generated approximately 40% of our revenues from operations outside the United States. Although a portion of our revenues are denominated in various currencies, the selling prices of the majority of our sales outside the United States are referenced in U.S. dollars, and as a result, our revenues have not been significantly affected by currency movements. We are subject to currency risk to the extent that our costs are denominated in currencies other than those in which we earn revenues. We manufacture some of our major products in Brazil and Israel and production costs are largely denominated in local currencies, while the selling prices of the products are largely set in U.S. dollars. As such, we are exposed to changes in cost of goods sold resulting from currency movements and may not be able to adjust our selling prices to offset such movements. In addition, we incur selling and administrative expenses in various currencies and are exposed to changes in such expenses resulting from currency movements. For the year ended June 30, 2022, our expenses were not significantly affected by currency movements. Because our financial statements are reported in U.S. dollars, changes in currency exchange rates between the U.S. dollar and other currencies have had, and will continue to have, an impact on our results of operations.

Climate

Adverse weather events and natural disasters may interfere with and negatively impact operations at our manufacturing sites, research and development facilities and offices, which could have a material adverse effect on our financial condition and results of operations, especially if the impact of an event or disaster is frequent or prolonged.

Our operations, and the activities of our customers, could be disrupted by climate change. The physical changes caused by climate change may prompt changes in regulations or consumer preferences which in turn could have negative consequences for our and our customers' businesses. Climate change may negatively impact our customers' operations, particularly those in the livestock industry, through climate-related impacts such as increased air and water temperatures, rising water levels and increased incidence of disease in livestock. Potential physical risks from climate change may include altered distribution and intensity of rainfall, prolonged droughts or flooding, increased frequency of wildfires and other natural disasters, rising sea levels and a rising heat index, any of which could cause negative impacts to our and our customers' businesses. If such events affect our customers' businesses, they may purchase fewer of our products, and our revenues may be negatively impacted. Climate driven changes could have a material adverse effect on our financial condition and results of operations.

There has been a broad range of proposed and promulgated state, national and international regulations aimed at reducing the effects of climate change. Such regulations could result in additional costs to maintain compliance and additional income or other taxes. Climate change regulations continue to evolve, and it is not possible to accurately estimate potential future compliance costs.

Product development initiatives

Our future success depends on our existing product portfolio, including additional approvals for new claims for our products, for use of our products in new markets, for use of our products with new species and for cross-clearances enabling the use of our medicated products in conjunction with other products. Our future success also depends on our pipeline of new products, including new products that we may develop through joint ventures and products that we are able to obtain through license or acquisition. The majority of our R&D programs focus on product lifecycle development, which is defined as R&D programs that leverage existing animal health products by adding new species or claims, achieving approvals in new markets or creating new combinations and reformulations. We commit substantial effort, funds and other resources to expanding our product approvals and R&D, both through our own dedicated resources and through collaborations with third parties. We also commit significant resources to development of new vaccine technologies.

Our current strategic initiatives include several projects. We are working to develop a vaccine for African Swine Fever, a virulent disease that is highly lethal in swine. We have also developed pHi-Tech, a portable electronic vaccination device and software that ensures proper delivery of vaccines and provides health management information. We continue to invest in a vaccine production facility in Sligo, Ireland to manufacture poultry vaccines, with our first commercial sale of product realized in February 2022, and longer-term expectations to add swine and cattle vaccines. We are developing microbial products and bioproducts for a variety of applications serving animal health and nutrition, environmental, industrial and agricultural customers. We are also building a vaccine production facility in Guarulhos, Brazil to manufacture and market autogenous vaccines against animal diseases for swine, poultry and aquaculture. We continue to build our companion animal business and pipeline. Our Rejensa joint supplement for dogs continues to gain customer acceptance. Our companion animal development pipeline includes an early-stage atopic dermatitis compound, a novel Lyme vaccine delivery system product, two early-stage oral care compounds, and we entered into an agreement with Rejuvenate Bio, Inc. to collaborate on the development and commercialization of a gene therapy for MVD in canines.

Analysis of the consolidated statements of operations

Summary Results of Operations

For the Year Ended June 30	2022	2021	2020	Change 2022 / 2021		Change 2021/ 2020	
	(in thousands, except per share amounts and percentages)						
Net sales	$ 942,261	$ 833,350	$ 800,354	$ 108,911	*13 %*	$ 32,996	*4 %*
Gross profit	285,400	271,377	256,882	14,023	*5 %*	14,495	*6 %*
Selling, general and administrative expenses	206,414	196,509	187,688	9,905	*5 %*	8,821	*5 %*
Operating income	78,986	74,868	69,194	4,118	*6 %*	5,674	*8 %*
Interest expense, net	11,875	12,880	12,856	(1,005)	*(8)%*	24	*0 %*
Foreign currency (gains), net	(5,216)	(4,480)	826	(736)	*	(5,306)	*
Income before income taxes	72,327	66,468	55,512	5,859	*9 %*	10,956	*20 %*
Provision for income taxes	23,152	12,083	21,960	11,069	*92 %*	(9,877)	*(45)%*
Net income	$ 49,175	$ 54,385	$ 33,552	$ (5,210)	*(10)%*	$ 20,833	*62 %*
Net income per share							
Basic	$ 1.21	$ 1.34	$ 0.83	$ (0.13)		$ 0.51	
Diluted	$ 1.21	$ 1.34	$ 0.83	$ (0.13)		$ 0.51	
Weighted average number of shares outstanding							
Basic	40,504	40,473	40,454				
Diluted	40,504	40,504	40,504				
Ratio to net sales							
Gross profit	*30.3 %*	*32.6 %*	*32.1 %*				
Selling, general and administrative expenses	*21.9 %*	*23.6 %*	*23.5 %*				
Operating income	*8.4 %*	*9.0 %*	*8.6 %*				
Income before income taxes	*7.7 %*	*8.0 %*	*6.9 %*				
Net income	*5.2 %*	*6.5 %*	*4.2 %*				
Effective tax rate	*32.0 %*	*18.2 %*	*39.6 %*				

Certain amounts and percentages may reflect rounding adjustments.

* Calculation not meaningful

Changes in net sales from period to period primarily result from changes in volumes and average selling prices. Although a portion of our net sales is denominated in various currencies, the selling prices of the majority of our sales outside the United States are referenced in U.S. dollars, and as a result, currency movements have not significantly affected our revenues.

Our effective income tax rate has varied from period to period and from the federal statutory rate, due to the mix of taxable profits in various jurisdictions; changes in tax rates from period to period, including changes in income tax legislation in the United States and various international jurisdictions; and the effects of changes in uncertain tax positions and valuation allowances. Our future effective income tax rate will vary due to the relative amounts of taxable income in various jurisdictions, future changes in tax rates and legislation and other factors. We intend to continue to reinvest indefinitely the undistributed earnings of our foreign subsidiaries where we could be subject to applicable non-U.S. income and withholding taxes if amounts are repatriated to the U.S. See “Notes to Consolidated Financial Statements — Income Taxes” for additional information.

Net sales, Adjusted EBITDA and reconciliation of GAAP net income to Adjusted EBITDA

We report Net sales and Adjusted EBITDA by segment to understand the operating performance of each segment. This enables us to monitor changes in net sales, costs and other actionable operating metrics at the segment level. See "— General description of non-GAAP financial measures" for descriptions of EBITDA and Adjusted EBITDA.

Segment net sales and Adjusted EBITDA:

				Change			
For the Year Ended June 30	**2022**	**2021**	**2020**	**2022 / 2021**		**2021 / 2020**	
Net sales			(in thousands)				
MFAs and other	$ 361,538	$ 330,017	$ 322,300	$ 31,521	*10 %*	$ 7,717	*2 %*
Nutritional specialties	157,196	142,760	129,264	14,436	*10 %*	13,496	*10 %*
Vaccines	88,321	72,939	75,340	15,382	*21 %*	(2,401)	*(3)%*
Animal Health	607,055	545,716	526,904	61,339	*11 %*	18,812	*4 %*
Mineral Nutrition	259,512	220,560	214,412	38,952	*18 %*	6,148	*3 %*
Performance Products	75,694	67,074	59,038	8,620	*13 %*	8,036	*14 %*
Total	$ 942,261	$ 833,350	$ 800,354	$ 108,911	*13 %*	$ 32,996	*4 %*
Adjusted EBITDA							
Animal Health	$ 124,106	$ 123,953	$ 123,106	$ 153	*0 %*	$ 847	*1 %*
Mineral Nutrition	24,038	17,116	14,678	6,922	*40 %*	2,438	*17 %*
Performance Products	8,706	9,437	4,534	(731)	*(8)%*	4,903	*108 %*
Corporate	(45,767)	(42,624)	(40,178)	(3,143)	*7 %*	(2,446)	*6 %*
Total	$ 111,083	$ 107,882	$ 102,140	$ 3,201	*3 %*	$ 5,742	*6 %*
Adjusted EBITDA ratio to segment net sales							
Animal Health	*20.4 %*	*22.7 %*	*23.4 %*				
Mineral Nutrition	*9.3 %*	*7.8 %*	*6.8 %*				
Performance Products	*11.5 %*	*14.1 %*	*7.7 %*				
Corporate[(1)]	*(4.9)%*	*(5.1)%*	*(5.0)%*				
Total[(1)]	*11.8 %*	*12.9 %*	*12.8 %*				

(1) Reflects ratio to total net sales.

Certain amounts and percentages may reflect rounding adjustments.

* Calculation not meaningful

A reconciliation of net income, as reported under GAAP, to Adjusted EBITDA:

For the Year Ended June 30	2022	2021	2020	Change 2022/ 2021		Change 2021/ 2020	
			(in thousands)				
Net income	$ 49,175	$ 54,385	$ 33,552	$ (5,210)	*(10)%*	$ 20,833	*62 %*
Interest expense, net	11,875	12,880	12,856	(1,005)	*(8)%*	24	*0 %*
Provision for income taxes	23,152	12,083	21,960	11,069	*92 %*	(9,877)	*(45)%*
Depreciation and amortization	32,705	31,885	32,341	820	*3 %*	(456)	*(1)%*
EBITDA	116,907	111,233	100,709	5,674	*5 %*	10,524	*10 %*
Gain on sale of investment	(1,203)	—	—	(1,203)	*	—	*
Acquisition-related cost of goods sold	316	—	280	316	*	(280)	*
Acquisition-related transaction costs	279	—	462	279	*	(462)	*
Acquisition-related other, net [1]	—	—	(2,821)	—	*	2,821	*
Stock-based compensation	—	1,129	2,259	(1,129)	*	(1,130)	*
Restructuring costs	—	—	425	—	*	(425)	*
Foreign currency (gains) losses, net	(5,216)	(4,480)	826	(736)	*	(5,306)	*
Adjusted EBITDA	$ 111,083	$ 107,882	$ 102,140	$ 3,201	*3 %*	$ 5,742	*6 %*

(1) Acquisition-related other, net was primarily a result of a reduction to acquisition-related contingent consideration.

Certain amounts and percentages may reflect rounding adjustments.

* Calculation not meaningful

Comparison of the years ended June 30, 2022 and 2021

Net sales

Net sales of $942.3 million for the year ended June 30, 2022, increased $108.9 million, or 13%, as compared to the year ended June 30, 2021. Animal Health, Mineral Nutrition and Performance Products increased $61.3 million, $39.0 million and $8.6 million, respectively.

Animal Health

Net sales of $607.1 million for the year ended June 30, 2022, increased $61.3 million, or 11%. Net sales of MFAs and other increased $31.5 million, or 10%, due to increased demand for our MFAs, particularly in the Latin America and Canada regions, and for processing aids used in the ethanol fermentation industry, and due to higher average selling prices. Net sales of nutritional specialty products grew $14.4 million, or 10%, due to domestic demand for dairy products, international growth and volume growth in our companion animal product. Net sales of vaccines increased $15.4 million, or 21%, with increased demand in most regions.

Mineral Nutrition

Net sales of $259.5 million for the year ended June 30, 2022, increased $39.0 million, or 18%, primarily driven by higher average selling prices. The increase in average selling prices is correlated with the movement of the underlying raw material costs.

Performance Products

Net sales of $75.7 million for the year ended June 30, 2022, increased $8.6 million, or 13%, as a result of higher volumes of ingredients for personal care products and increases in average-selling prices of copper-based products.

Gross profit

Gross profit of $285.4 million for the year ended June 30, 2022, increased $14.0 million, or 5%, as compared to the year ended June 30, 2021. Gross margin decreased 230 basis points to 30.3% of net sales for the year ended June 30,

2022, as compared to 32.6% for the year ended June 30, 2021. The year ended June 30, 2022, included $0.3 million of acquisition-related cost of goods sold.

Animal Health gross profit increased $7.9 million due to increased sales, partially offset by increases in material costs. Mineral Nutrition gross profit increased $7.3 million, driven by increases in average selling prices, partially offset by increases in raw material costs. Performance Products gross profit decreased $0.8 million, driven by higher raw material and production costs. Acquisition-related cost of goods sold reduced gross profit by $0.3 million.

Selling, general and administrative expenses

SG&A expenses of $206.4 million for the year ended June 30, 2022, increased $9.9 million, or 5%, as compared to the year ended June 30, 2021. SG&A for the year ended June 30, 2022, included a $1.2 million gain on sale of investment and $0.3 million of acquisition-related transaction costs. SG&A for the year ended June 30, 2021, included $1.1 million of stock-based compensation. Excluding these items, SG&A increased $12.2 million, or 6%.

Animal Health SG&A increased $8.7 million, primarily due to increases in employee and related costs, marketing, product development and travel. Mineral Nutrition and Performance Products SG&A were comparable to the prior year. Corporate expenses increased $3.1 million, driven by investments in strategic initiatives. The gain on sale of investment, acquisition-related transaction costs and stock-based compensation accounted for a $2.1 million decrease in SG&A.

Interest expense, net

Interest expense, net of $11.9 million for the year ended June 30, 2022, decreased by $1.0 million as compared to the year ended June 30, 2021. Interest expense for the year ended June 30, 2021, included $1.0 million of expense related to the April 2021 refinancing.

Foreign currency (gains) losses, net

Foreign currency gains, net for the year ended June 30, 2022, were $5.2 million, as compared to net gains of $4.5 million for the year ended June 30, 2021. Foreign currency gains, net primarily arose from intercompany balances, driven by the movement of the Brazilian and Turkish currencies relative to the U.S. dollar.

Provision for income taxes

The provision for income taxes was $23.2 million and $12.1 million for the years ended June 30, 2022 and 2021, respectively. The effective income tax rate was 32.0% and 18.2% for the years ended June 30, 2022 and 2021, respectively. Our effective income tax rate has varied from period to period and from the federal statutory rate, due to the mix of income in the various jurisdictions where we have operations, changes in tax rates from period to period and the effects of certain other items. The provision for income taxes during the year ended June 30, 2022, included (i) a $2.6 million benefit from the reversal of uncertain tax positions related to settlements and the lapse of statute of limitations of prior years, (ii) a $4.1 million expense related to increases to reserves for uncertain tax positions due to the complex nature of tax law in various jurisdictions and related interpretations of tax law, (iii) a $1.0 million benefit from the release of a valuation allowance, and (iv) a $0.3 million expense related to a detailed analysis of various other items. The effective income tax rate, without these items, would have been 30.9% for the year ended June 30, 2022.

Net income

Net income of $49.2 million for the year ended June 30, 2022, decreased $5.2 million, as compared to net income of $54.4 million for the year ended June 30, 2021. The decrease was a result of a $11.1 million increase in the provision for income taxes and increased SG&A costs of $9.9 million. These decreases were partially offset by higher operating income of $4.1 million, lower interest expense, net, of $1.0 million and increased foreign currency gains of $0.7 million. SG&A costs increased due to employee and related costs, marketing, product development, travel and incremental investments relating to strategic initiatives.

Adjusted EBITDA

Adjusted EBITDA of $111.1 million for the year ended June 30, 2022, increased $3.2 million, or 3%, as compared to the year ended June 30, 2021. Animal Health Adjusted EBITDA increased $0.2 million, driven by higher gross profit, mostly offset by higher SG&A expenses. Mineral Nutrition Adjusted EBITDA increased $6.9 million driven by increases in average selling prices, partially offset by increases in raw material costs. Performance Products Adjusted EBITDA decreased by $0.7 million, or 8%, due to higher raw material and production costs. Corporate expenses increased $3.1 million because of incremental investments relating to strategic initiatives.

Comparison of the years ended June 30, 2021 and 2020

For a comparison of our results of operations for the years ended June 30, 2021 and 2020, and an analysis of our financial condition, liquidity and capital resources for the year ended June 30, 2021, see "Part II. Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the fiscal year ended June 30, 2021, filed with the SEC on August 25, 2021.

Analysis of financial condition, liquidity and capital resources

Net increase (decrease) in cash and cash equivalents was:

For the Year Ended June 30	2022	2021	2020	Change 2022/ 2021	Change 2021/ 2020
			(in thousands)		
Cash provided (used) by:					
Operating activities	$ 31,649	$ 48,306	$ 59,348	$ (16,657)	$ (11,042)
Investing activities	(22,582)	(18,580)	(120,390)	(4,002)	101,810
Financing activities	16,343	(16,995)	40,936	33,338	(57,931)
Effect of exchange-rate changes on cash and cash equivalents	(1,374)	1,138	(1,124)	(2,512)	2,262
Net increase in cash and cash equivalents	$ 24,036	$ 13,869	$ (21,230)	$ 10,167	$ 35,099

Net cash provided by operating activities was comprised of:

For the Year Ended June 30	2022	2021	2020	Change 2022 / 2021	Change 2021 / 2020
			(in thousands)		
EBITDA	$ 111,083	$ 111,233	$ 100,709	$ (150)	$ 10,524
Adjustments:					
Gain on sale of investment	(1,203)	—	—	(1,203)	—
Acquisition-related cost of goods sold	316	—	280	316	(280)
Acquisition-related transaction costs	279	—	462	279	(462)
Acquisition-related other, net	—	—	(2,821)	—	2,821
Stock-based compensation	—	1,129	2,259	(1,129)	(1,130)
Restructuring costs	—	—	425	—	(425)
Foreign currency (gains), net	(5,216)	(4,480)	826	(736)	(5,306)
Interest paid, net	(11,159)	(10,808)	(11,577)	(351)	769
Income taxes paid	(17,854)	(19,395)	(20,866)	1,541	1,471
Changes in operating assets and liabilities and other items	(44,597)	(29,373)	(10,349)	(15,224)	(19,024)
Net cash provided by operating activities	$ 31,649	$ 48,306	$ 59,348	$ (16,657)	$ (11,042)

Certain amounts may reflect rounding adjustments.

Operating activities

Operating activities provided $31.6 million of net cash for the year ended June 30, 2022. Net cash provided by operating activities was driven by strong business performance, resulting in cash provided by net income and non-cash

items, including depreciation and amortization, of $76.3 million, offset by cash used in the ordinary course of business for changes in operating assets and liabilities of $44.6 million. Changes in operating assets and liabilities included $23.6 million of cash used to fund a build of accounts receivable correlated with strong growth in net sales, particularly in the fourth quarter, $47.0 million of cash used to replenish inventory levels during a period when inflation was driving higher costs of material and labor, offset by $26.4 million of cash provided by accounts payable related to the timing of payments to suppliers, with the remaining $0.4 million of cash used to fund changes in other current assets, other assets and accrued expenses and other liabilities.

Operating activities provided $48.3 million of net cash for the year ended June 30, 2021. Profitable business performance resulted in cash provided by net income and non-cash items, including depreciation and amortization, of $78.2 million. Cash used in the ordinary course of business for changes in operating assets and liabilities was $29.9 million. Accounts receivable used $18.2 million of cash due to increased sales and timing of collections. Cash used for inventory was $12.5 million, primarily due to forecasted future demand and internal production schedules. For certain products, we are maintaining safety stocks to mitigate potential disruptions in production. Other current assets and other assets used $1.6 million and $1.9 million of cash, respectively. Accounts payable provided $3.2 million of cash due to timing of payments. Accrued expenses and other liabilities provided cash of $1.2 million due to timing of payments for employee-related liabilities.

Investing activities

Investing activities used $22.6 million of net cash for the year ended June 30, 2022. Capital expenditures were $37.0 million as we continued to invest in expanding production capacity and productivity improvements. Net proceeds from maturities of short-term investments were $26.0 million. We used $13.5 million for the acquisition of a business in Brazil, which develops, manufacturers and markets processing aids used in the ethanol industry. Other investing activities provided $2.0 million of cash.

Investing activities used $18.6 million of net cash for the year ended June 30, 2021. Capital expenditures were $29.3 million as we continued to invest in expanding production capacity and productivity improvements. Net proceeds from maturities of short-term investments were $12.0 million. Other investing activities used $1.3 million of cash.

Financing activities

Financing activities provided $16.3 million of net cash for the year ended June 30, 2022. Net borrowings on our 2021 Revolver provided $50.0 million. We paid $19.4 million in dividends to holders of our Class A and Class B common stock. We paid $9.4 million in scheduled debt maturities. We paid $4.8 million for acquisition-related contingent consideration.

Financing activities used $17.0 million of net cash for the year ended June 30, 2021. We used proceeds from the April 2021 refinancing to pay all outstanding term loan and revolving credit balances under the 2017 Credit Facilities. We paid $2.9 million in debt issuance costs relating to the refinancing. We paid $19.4 million in dividends to holders of our Class A and Class B common stock.

Liquidity and capital resources

We believe our cash on hand, our operating cash flows and our financing arrangements, including the availability of borrowings under the 2021 Revolver and foreign credit lines, will be sufficient to support our ongoing cash needs. We have considered the current and potential future effects of the macroeconomic market conditions in the financial markets. At this time, we expect adequate liquidity for at least the next twelve months. However, we can provide no assurance that our liquidity and capital resources will be adequate for future funding requirements. We believe we will be able to comply with the terms of the covenants under the 2021 Credit Facilities and foreign credit lines based on our operating plan. In the event of adverse operating results and/or violation of covenants under the facilities, there can be no assurance we would be able to obtain waivers or amendments. Other risks to our meeting future funding requirements include global economic conditions and macroeconomic, business and financial disruptions that could arise, including those caused by COVID-19. There can be no assurance that a challenging economic environment or an economic downturn would not affect our liquidity or our ability to obtain future financing or fund operations or investment opportunities. In addition, our debt covenants may restrict our ability to invest. Certain relevant measures of our liquidity and capital resources follow:

As of June 30	2022	2021	2020	Change 2022 / 2021	Change 2021 / 2020
			(in thousands, except ratios)		
Cash and cash equivalents and short-term investments	$ 91,248	$ 93,212	$ 91,343	$ (1,964)	$ 1,869
Working capital	299,152	250,956	222,006	48,196	28,950
Ratio of current assets to current liabilities	2.70:1	2.62:1	2.60:1		

We define working capital as total current assets (excluding cash and cash equivalents and short-term investments) less total current liabilities (excluding current portion of long-term debt). We calculate the ratio of current assets to current liabilities based on this definition.

At June 30, 2022, we had $145.0 million in outstanding borrowings under the 2021 Revolver. We had outstanding letters of credit and other commitments of $2.5 million, leaving $102.5 million available for borrowings and letters of credit, subject to restriction in our 2021 Credit Facilities.

We currently intend to pay quarterly dividends on our Class A and Class B common stock, subject to approval from the Board of Directors. Our Board of Directors has declared a cash dividend of $0.12 per share on Class A common stock and Class B common stock, payable on September 28, 2022. Our future ability to pay dividends will depend upon our results of operations, financial condition, capital requirements, our ability to obtain funds from our subsidiaries and other factors that our Board of Directors deems relevant. Additionally, the terms of our current and any future agreements governing our indebtedness could limit our ability to pay dividends or make other distributions.

We do not expect to contribute to the domestic pension plan during 2023, based on the funded status at June 30, 2022.

At June 30, 2022, our cash and cash equivalents and short-term investments included $88.5 million held by our international subsidiaries. There are no restrictions on cash distributions to PAHC from our international subsidiaries.

Contractual obligations

Our contractual obligations include maturities under the 2021 Credit Facilities, including future interest accruals, operating lease commitments, and certain purchase obligations. See “Notes to Consolidated Financial Statements – Debt, Leases, and Commitment and Contingencies.”

Analysis of the consolidated balance sheets

As of June 30	2022	2021	2020	Change 2022 / 2021	Change 2021 / 2020
			(in thousands)		
Accounts receivable - trade	$ 166,537	$ 146,852	$ 126,522	$ 19,685	$ 20,330
DSO	59	60	61		

Payment terms outside the U.S. are typically longer than in the United States. We regularly monitor our accounts receivable for collectability, particularly in countries where economic conditions remain uncertain. We believe that our reserve for credit losses is appropriate. Our assessment is based on such factors as past due history, historical and expected collection patterns, the financial condition of our customers, the robust nature of our credit and collection practices and the economic environment. We calculate DSO based on a 360-day year and compare accounts receivable with sales for the quarter ending at the balance sheet date.

As of June 30	2022	2021	2020	Change 2022 / 2021	Change 2021 / 2020
			(in thousands)		
Inventories	$ 259,158	$ 216,312	$ 196,659	$ 42,846	$ 19,653

Inventory increased by $42.8 million in 2022, primarily due to higher raw material and production costs.

Off-balance sheet arrangements

We currently do not use off-balance sheet arrangements for the purpose of credit enhancement, hedging transactions, investment or other financial purposes.

In the ordinary course of business, we may indemnify our counterparties against certain liabilities that may arise. These indemnifications typically pertain to environmental matters. If the indemnified party were to make a successful claim pursuant to the terms of the indemnification, we would be required to reimburse the loss. These indemnifications generally are subject to certain restrictions and limitations.

Selected Quarterly Financial Data (Unaudited)

To facilitate quarterly comparisons, the following unaudited information presents the quarterly results of operations, including segment data, for the years ended June 30, 2022 and 2021. This quarterly financial data was prepared on the same basis as, and should be read in conjunction with, the audited consolidated financial statements and related notes included herein.

	Quarters				Year
For the Periods Ended	September 30, 2021	December 31, 2021	March 31, 2022	June 30, 2022	June 30, 2022
			(in thousands)		
Net sales					
MFAs and other	$ 83,758	$ 91,724	$ 84,330	$ 101,726	$ 361,538
Nutritional Specialties	35,997	37,330	41,394	42,475	157,196
Vaccines	21,249	21,873	22,865	22,334	88,321
Animal Health	$ 141,004	$ 150,927	$ 148,589	$ 166,535	$ 607,055
Mineral Nutrition	54,432	66,655	69,033	69,392	259,512
Performance Products	19,229	15,130	21,997	19,338	75,694
Total net sales	214,665	232,712	239,619	255,265	942,261
Cost of goods sold	149,987	162,040	167,993	176,841	656,861
Gross profit	64,678	70,672	71,626	78,424	285,400
Selling, general and administrative expenses	50,066	48,378	52,432	55,538	206,414
Operating income	14,612	22,294	19,194	22,886	78,986
Interest expense, net	2,889	2,953	2,925	3,108	11,875
Foreign currency (gains) losses, net	2,128	(4,189)	(10,564)	7,409	(5,216)
Income before income taxes	9,595	23,530	26,833	12,369	72,327
Provision for income taxes	3,061	6,065	9,144	4,882	23,152
Net income	$ 6,534	$ 17,465	$ 17,689	$ 7,487	$ 49,175
Net income per share					
basic	$ 0.16	$ 0.43	$ 0.44	$ 0.18	$ 1.21
diluted	$ 0.16	$ 0.43	$ 0.44	$ 0.18	$ 1.21
Adjusted EBITDA					
Animal Health	$ 27,637	$ 33,696	$ 29,232	$ 33,541	$ 124,106
Mineral Nutrition	4,533	5,525	7,303	6,677	24,038
Performance Products	2,138	1,324	2,865	2,379	8,706
Corporate	(11,842)	(11,453)	(11,404)	(11,068)	(45,767)
Adjusted EBITDA	$ 22,466	$ 29,092	$ 27,996	$ 31,529	$ 111,083
Reconciliation of net income to Adjusted EBITDA					
Net income	$ 6,534	$ 17,465	$ 17,689	$ 7,487	$ 49,175
Interest expense, net	2,889	2,953	2,925	3,108	11,875
Provision for income taxes	3,061	6,065	9,144	4,882	23,152
Depreciation and amortization	7,854	8,001	8,445	8,405	32,705
EBITDA	20,338	34,484	38,203	23,882	116,907
Acquisition-related cost of goods sold	—	—	78	238	316
Acquisition-related transaction costs	—	—	279	—	279
Gain on sale of investment	—	(1,203)	—	—	(1,203)
Foreign currency (gains) losses, net	2,128	(4,189)	(10,564)	7,409	(5,216)
Adjusted EBITDA	$ 22,466	$ 29,092	$ 27,996	$ 31,529	$ 111,083

For the Periods Ended	Quarters				Year
	September 30, 2020	December 31, 2020	March 31, 2021	June 30, 2021	June 30, 2021
	(in thousands)				
Net sales					
MFAs and other	$ 78,703	$ 81,577	$ 78,530	$ 91,207	$ 330,017
Nutritional Specialties	32,600	36,394	36,978	36,788	142,760
Vaccines	17,066	18,267	18,872	18,734	72,939
Animal Health	$ 128,369	$ 136,238	$ 134,380	$ 146,729	$ 545,716
Mineral Nutrition	51,440	54,157	58,153	56,810	220,560
Performance Products	15,385	15,754	19,196	16,739	67,074
Total net sales	195,194	206,149	211,729	220,278	833,350
Cost of goods sold	131,075	137,884	142,564	150,450	561,973
Gross profit	64,119	68,265	69,165	69,828	271,377
Selling, general and administrative expenses	48,431	48,375	49,033	50,670	196,509
Operating income	15,688	19,890	20,132	19,158	74,868
Interest expense, net	2,810	3,214	2,933	3,923	12,880
Foreign currency (gains) losses, net	(3,631)	624	(583)	(890)	(4,480)
Income before income taxes	16,509	16,052	17,782	16,125	66,468
Provision (benefit) for income taxes	4,207	3,251	5,621	(996)	12,083
Net income	$ 12,302	$ 12,801	$ 12,161	$ 17,121	$ 54,385
Net income per share					
basic	$ 0.30	$ 0.32	$ 0.30	$ 0.42	$ 1.34
diluted	$ 0.30	$ 0.32	$ 0.30	$ 0.42	$ 1.34
Adjusted EBITDA					
Animal Health	$ 30,101	$ 33,349	$ 30,962	$ 29,541	$ 123,953
Mineral Nutrition	3,047	4,185	5,232	4,652	17,116
Performance Products	1,972	2,266	2,929	2,270	9,437
Corporate	(10,831)	(11,258)	(11,073)	(9,462)	(42,624)
Adjusted EBITDA	$ 24,289	$ 28,542	$ 28,050	$ 27,001	$ 107,882
Reconciliation of net income to Adjusted EBITDA					
Net income	$ 12,302	$ 12,801	$ 12,161	$ 17,121	$ 54,385
Interest expense, net	2,810	3,214	2,933	3,923	12,880
Provision (benefit) for income taxes	4,207	3,251	5,621	(996)	12,083
Depreciation and amortization	8,036	8,088	7,918	7,843	31,885
EBITDA	27,355	27,354	28,633	27,891	111,233
Stock-based compensation	565	564	—	—	1,129
Foreign currency (gains) losses, net	(3,631)	624	(583)	(890)	(4,480)
Adjusted EBITDA	$ 24,289	$ 28,542	$ 28,050	$ 27,001	$ 107,882

General description of non-GAAP financial measures

Adjusted EBITDA

Adjusted EBITDA is an alternative view of performance used by management as our primary operating measure, and we believe that investors' understanding of our performance is enhanced by disclosing this performance measure. We report Adjusted EBITDA to reflect the results of our operations prior to considering certain income statement elements. We have defined EBITDA as net income (loss) plus (i) interest expense, net, (ii) provision for income taxes or less benefit for income taxes, and (iii) depreciation and amortization. We have defined Adjusted EBITDA as EBITDA plus (a) (income) loss from, and disposal of, discontinued operations, (b) other expense or less other income, as separately reported on our consolidated statements of operations, including foreign currency gains and losses, and (c) certain items that we consider to be unusual, non-operational or non-recurring. The Adjusted EBITDA measure is not, and should not be viewed as, a substitute for GAAP reported net income.

The Adjusted EBITDA measure is an important internal measurement for us. We measure our overall performance on this basis in conjunction with other performance metrics. The following are examples of how our Adjusted EBITDA measure is utilized:

- senior management receives a monthly analysis of our operating results that is prepared on an Adjusted EBITDA basis;
- our annual budgets are prepared on an Adjusted EBITDA basis; and
- other goal setting and performance measurements are prepared on an Adjusted EBITDA basis.

Despite the importance of this measure to management in goal setting and performance measurement, Adjusted EBITDA is a non-GAAP financial measure that has no standardized meaning prescribed by GAAP and, therefore, has limits in its usefulness to investors. Because of its non-standardized definition, Adjusted EBITDA, unlike GAAP net income, may not be comparable to the calculation of similar measures of other companies. Adjusted EBITDA is presented to permit investors to more fully understand how management assesses performance.

We also recognize that, as an internal measure of performance, the Adjusted EBITDA measure has limitations, and we do not restrict our performance management process solely to this metric. A limitation of the Adjusted EBITDA measure is that it provides a view of our operations without including all events during a period, such as the depreciation of property, plant and equipment or amortization of acquired intangibles, and does not provide a comparable view of our performance to other companies.

Certain significant items

Adjusted EBITDA is calculated prior to considering certain items. We evaluate such items on an individual basis. Such evaluation considers both the quantitative and the qualitative aspect of their unusual or non-operational nature. Unusual, in this context, may represent items that are not part of our ongoing business; items that, either as a result of their nature or size, we would not expect to occur as part of our normal business on a regular basis.

We consider acquisition-related activities and business restructuring costs related to productivity and cost saving initiatives, including employee separation costs, to be unusual items that we do not expect to occur as part of our normal business on a regular basis. We consider foreign currency gains and losses to be non-operational because they arise principally from intercompany transactions and are largely non-cash in nature.

New accounting standards

For discussion of new accounting standards, see “Notes to Consolidated Financial Statements — Summary of Significant Accounting Policies and New Accounting Standards.”

Critical accounting policies

Critical accounting policies are those that require application of management’s most difficult, subjective and/or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Not all accounting policies require management to make difficult, subjective or complex judgments or estimates. In presenting our consolidated financial statements in accordance with generally accepted accounting principles in the United States of America (GAAP), we are required to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Actual results that differ from our estimates and assumptions could have an unfavorable effect on our financial position and results of operations.

The following is a summary of accounting policies that we consider critical to the consolidated financial statements.

Revenue Recognition

We recognize revenue from product sales when control of the products has transferred to the customer, typically when title and risk of loss transfer to the customer. Certain of our businesses have terms where control of the underlying product transfers to the customer on shipment, while others have terms where control transfers to the customer on delivery.

Revenue reflects the total consideration to which we expect to be entitled, in exchange for delivery of products or services, net of variable consideration. Variable consideration includes customer programs and incentive offerings, including pricing arrangements, rebates and other volume-based incentives. We record reductions to revenue for estimated variable consideration at the time we record the sale. Our estimates for variable consideration reflect the amount by which we expect variable consideration to affect the revenue recognized. Such estimates are based on contractual terms and historical experience, and are adjusted to reflect future expectations as new information becomes available. Historically, we have not had significant adjustments to our estimates of customer incentives. Sales returns and product recalls have been insignificant and infrequent due to the nature of the products we sell.

Net sales include shipping and handling fees billed to customers. The associated costs are considered fulfillment activities, not additional promised services to the customer, and are included in costs of goods sold when the related revenue is recognized in the consolidated statements of operations. Net sales exclude value-added and other taxes based on sales.

Business Combinations

Our consolidated financial statements reflect the operations of an acquired business beginning as of the date of acquisition. Assets acquired and liabilities assumed are recorded at their fair values at the date of acquisition; goodwill is recorded for any excess of the purchase price over the fair values of the net assets acquired. Significant judgment may be required to determine the fair values of certain tangible and intangible assets and in assigning their respective useful lives. Significant judgment also may be required to determine the fair values of contingent consideration, if any. We typically utilize third-party valuation specialists to assist us in determining fair values of significant tangible and intangible assets and contingent consideration. The fair values are based on available historical information and on future expectations and assumptions deemed reasonable by management, but are inherently uncertain. We typically use an income method to measure the fair value of intangible assets, based on forecasts of the expected future cash flows attributable to the respective assets. Significant estimates and assumptions inherent in the valuations reflect consideration of other marketplace participants, and include the amount and timing of future cash flows, specifically the expected revenue growth rate applied to the cash flows. Unanticipated market or macroeconomic events and circumstances could affect the accuracy or validity of the estimates and assumptions. Determining the useful life of an intangible asset also requires judgment. Our estimates of the useful lives of intangible assets primarily are based on a number of factors including the competitive environment, underlying product life cycles, operating plans and the macroeconomic environment of the countries in which the products are sold. Intangible assets are amortized over their estimated lives. Intangible assets associated with acquired in-process research and development activities ("IPR&D") are not amortized until a product is available for sale and regulatory approval is obtained.

Long-Lived Assets and Goodwill

We periodically review our long-lived and amortizable intangible assets for impairment and assess whether significant events or changes in business circumstances indicate that the carrying value of the assets may not be recoverable. Such circumstances may include a significant decrease in the market price of an asset, a significant adverse change in the manner in which the asset is being used or in its physical condition or a history of operating or cash flow losses associated with the use of an asset. We recognize an impairment loss when the carrying amount of an asset exceeds the anticipated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss is the excess of the asset's carrying value over its fair value. In addition, we periodically reassess the estimated remaining useful lives of our long-lived and amortizable intangible assets. Changes to estimated useful lives would affect the amount of depreciation and amortization recorded in the consolidated statements of operations.

Goodwill represents the excess of the purchase price over the fair value of the identifiable net assets acquired in a business combination. We assess goodwill for impairment annually during the fourth quarter, or more frequently if impairment indicators exist. Impairment exists when the carrying amount of goodwill exceeds its implied fair value. We may elect to assess our goodwill for impairment using a qualitative or a quantitative approach, to determine whether it is more likely than not that the fair value of goodwill is greater than its carrying value. During the three months ended June 30, 2022, we tested goodwill using a quantitative approach and determined goodwill was not impaired. We have not recorded any goodwill impairment charges in the periods included in the consolidated financial statements.

We evaluate our investments in equity method investees for impairment if circumstances indicate that the fair value of the investment may be impaired. The assets underlying a $2.7 million equity investment are currently idle; we have concluded the investment is not impaired, based on expected future operating cash flows and/or disposal value.

Income Taxes

The provision for income taxes includes U.S. federal, state and foreign income taxes and foreign withholding taxes. Our annual effective income tax rate is determined based on our income, statutory tax rates and tax planning opportunities available in the various jurisdictions in which we operate and the tax impacts of items treated differently for tax purposes than for financial reporting purposes. Tax law requires certain items be included in the tax return at different times than the items are reflected in the financial statements. Some of these differences are permanent, such as expenses that are not deductible in our tax return, and some differences are temporary, reversing over time, such as depreciation expense. These temporary differences give rise to deferred tax assets and liabilities. Deferred tax assets generally represent the tax effect of items that can be used as a tax deduction or credit in future years for which we have already recorded the tax benefit in our income statement. Deferred tax liabilities generally represent the tax effect of items recorded as tax expense in our income statement for which payment has been deferred, the tax effect of expenditures for which a deduction has already been taken in our tax return but has not yet been recognized in our income statement or the tax effect of assets recorded at fair value in business combinations for which there was no corresponding tax basis adjustment.

The recognition and measurement of a tax position is based on management's best judgment given the facts, circumstances and information available at the reporting date. Inherent in determining our annual effective income tax rate are judgments regarding business plans, planning opportunities and expectations about future outcomes. Realization of certain deferred tax assets, primarily net operating loss carryforwards, is dependent upon generating sufficient future taxable income in the appropriate jurisdiction prior to the expiration of the carryforward periods. We establish valuation allowances for deferred tax assets when the amount of expected future taxable income is not likely to support the use of the deduction or credit.

We may take tax positions that management believes are supportable, but are potentially subject to successful challenge by the applicable taxing authority in the jurisdictions where we operate. We evaluate our tax positions and establish liabilities in accordance with the applicable accounting guidance on uncertainty in income taxes. We review these tax uncertainties in light of changing facts and circumstances, such as the progress of tax audits, and adjust them accordingly.

We account for income tax contingencies using a benefit recognition model. If our initial assessment does not result in the recognition of a tax benefit, we regularly monitor our position and subsequently recognize the tax benefit if: (i) there are changes in tax law or there is new information that sufficiently raise the likelihood of prevailing on the technical merits of the position to "more likely than not;" (ii) the statute of limitations expires; or (iii) there is a completion of an audit resulting in a favorable settlement of that tax year with the appropriate agency. We regularly re-evaluate our tax positions based on the results of audits of federal, state and foreign income tax filings, statute of limitations expirations, and changes in tax law or receipt of new information that would either increase or decrease the technical merits of a position relative to the "more-likely-than-not" standard.

Our assessments concerning uncertain tax positions are based on estimates and assumptions that have been deemed reasonable by management, but our estimates of unrecognized tax benefits and potential tax benefits may not be representative of actual outcomes, and variation from such estimates could materially affect our financial statements in the period of settlement or when the statutes of limitations expire. Finalizing audits with the relevant taxing authorities can include formal administrative and legal proceedings, and, as a result, it is difficult to estimate the timing and range of possible changes related to our uncertain tax positions, and such changes could be significant.

Because there are a number of estimates and assumptions inherent in calculating the various components of our income tax provision, certain future events such as changes in tax legislation, geographic mix of earnings, completion of tax audits or earnings repatriation plans could have an impact on those estimates and our effective income tax rate.

We consider undistributed earnings of foreign subsidiaries to be indefinitely reinvested in our international operations. The undistributed earnings of foreign subsidiaries were subject to the U.S. one-time mandatory toll charge and are eligible to be repatriated to the U.S. without additional U.S. tax under the Tax Act. Should our plans change and

we decide to repatriate some or all of the remaining cash held by our international subsidiaries, the amounts repatriated could be subject to applicable non-U.S. income and withholding taxes in international jurisdictions.

For more information regarding our significant accounting policies, estimates and assumptions, see "Notes to Consolidated Financial Statements — Summary of Significant Accounting Policies and New Accounting Standards."

Contingencies

Legal matters

We are subject to numerous contingencies arising in the ordinary course of business, such as product liability and other product-related litigation, commercial litigation, environmental claims and proceedings and government investigations. Certain of these contingencies could result in losses, including damages, fines and/or civil penalties, and/or criminal charges, which could be substantial. We believe that we have strong defenses in these types of matters, but litigation is inherently unpredictable and excessive verdicts do occur. We do not believe that any of these matters will have a material adverse effect on our financial position. However, we could incur judgments, enter into settlements or revise our expectations regarding the outcome of certain matters, and such developments could have a material adverse effect on our results of operations or cash flows in the period in which the amounts are paid and/or accrued.

We have accrued for losses that are both probable and reasonably estimable. Substantially all of these contingencies are subject to significant uncertainties and, therefore, determining the likelihood of a loss and/or the measurement of any loss can be complex. Consequently, we are unable to estimate the range of reasonably possible loss in excess of amounts accrued. Our assessments are based on estimates and assumptions that have been deemed reasonable by management, but the assessment process relies heavily on estimates and assumptions that may prove to be incomplete or inaccurate, and unanticipated events and circumstances may occur that might cause us to change those estimates and assumptions.

Environmental

Our operations and properties are subject to Environmental Laws and regulations. As such, the nature of our current and former operations exposes us to the risk of claims with respect to such matters, including fines, penalties and remediation obligations that may be imposed by regulatory authorities. Under certain circumstances, we might be required to curtail operations until a particular problem is remedied. Known costs and expenses under Environmental Laws incidental to ongoing operations, including the cost of litigation proceedings relating to environmental matters, are generally included within operating results. Potential costs and expenses may also be incurred in connection with the repair or upgrade of facilities to meet existing or new requirements under Environmental Laws or to investigate or remediate potential or actual contamination and from time to time we establish reserves for such contemplated investigation and remediation costs. In many instances, the ultimate costs under Environmental Laws and the time period during which such costs are likely to be incurred are difficult to predict.

While we believe that our operations are currently in material compliance with Environmental Laws, we have, from time to time, received notices of violation from governmental authorities, and have been involved in civil or criminal action for such violations. Additionally, at various sites, our subsidiaries are engaged in continuing investigation, remediation and/or monitoring efforts to address contamination associated with historic operations of the sites. We devote considerable resources to complying with Environmental Laws and managing environmental liabilities. We have developed programs to identify requirements under, and maintain compliance with Environmental Laws; however, we cannot predict with certainty the impact of increased and more stringent regulation on our operations, future capital expenditure requirements, or the cost of compliance.

The nature of our current and former operations exposes us to the risk of claims with respect to environmental matters and we cannot assure we will not incur material costs and liabilities in connection with such claims. Based upon our experience to date, we believe that the future cost of compliance with existing Environmental Laws, and liabilities for known environmental claims pursuant to such Environmental Laws, will not have a material adverse effect on our financial position, results of operations, cash flows or liquidity.

For additional details, see "Notes to Consolidated Financial Statements — Commitments and Contingencies."

For additional details, see "Business — Environmental, Health and Safety."

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Foreign exchange risk

Portions of our net sales and costs are exposed to changes in foreign exchanges rates. Our products are sold in more than 80 countries and, as a result, our revenues are influenced by changes in foreign exchange rates. Because we operate in multiple foreign currencies, changes in those currencies relative to the U.S. dollar could affect our revenue and expenses, and consequently, net income. Exchange rate fluctuations may also have an effect beyond our reported financial results and directly affect operations. These fluctuations may affect the ability to buy and sell our goods and services in markets affected by significant exchange rate variances.

Our primary foreign currency exposures are to the Brazilian and Israeli currencies. From time to time, we manage foreign exchange risk through the use of foreign currency derivative contracts. We use these contracts to mitigate the potential earnings effects from exposure to foreign currencies.

We analyzed our foreign currency derivative contracts at June 30, 2022 to determine their sensitivity to exchange rate changes. The analysis indicates that if the U.S. dollar were to appreciate or depreciate by 10%, the fair value of these contracts would decrease by $0.3 million or increase by $1.8 million. For additional details, see "Notes to Consolidated Financial Statements — Derivatives."

Interest rate risk

We have effectively converted $300 million of our outstanding debt to fixed interest rates through June 2025, through the use of interest rate swap agreements. Our debt in excess of $300 million and all debt after the maturity of the interest rate swap agreements is floating interest rate debt. Our 2021 Credit Facilities carry floating interest rates based on LIBOR and the Prime Rate, to the extent not effectively converted to fixed interest rate debt. Therefore, our profitability and cash flows are exposed to interest rate fluctuations. Our interest rates also include variable applicable rates in addition to the LIBOR portion of our interest obligation. The applicable rates vary from 1.50% to 2.00%, based on the First Lien Net Leverage Ratio, as defined in the 2021 Credit Facilities.

In July 2017, we entered into an interest rate swap agreement on $150 million of notional principal that effectively converts the floating LIBOR portion of our interest obligation on that amount of debt to a fixed interest rate of 1.8325%. The agreement matured in June 2022. In March 2020, we entered into an interest rate swap agreement on an additional $150 million of notional principal that effectively converts the floating LIBOR portion of our interest obligation on that amount of debt to a fixed rate of 0.62%. On the maturity of the July 2017 agreement, the March 2020 agreement increased to a notional principal amount of $300 million through June 2025, and effectively converts the floating LIBOR portion of our interest obligation on $300 million of debt to a fixed interest rate of 0.62%. We designated the interest rate swaps as highly effective cash flow hedges.

Based on our outstanding debt balances and the applicable rate in effect as of June 30, 2022, and considering the interest rate swap agreement, a 100-basis point increase in LIBOR would increase annual interest expense and decrease cash flows by $1.4 million. For additional details, see "Notes to the Consolidated Financial Statements — Debt" and "Notes to the Consolidated Financial Statements — Derivatives."

Item 8. Financial Statements and Supplementary Data

PHIBRO ANIMAL HEALTH CORPORATION

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Phibro Animal Health Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Phibro Animal Health Corporation and its subsidiaries (the "Company") as of June 30, 2022 and 2021, and the related consolidated statements of operations, of comprehensive income, of changes in shareholders' equity and of cash flows for each of the three years in the period ended June 30, 2022, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of June 30, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of June 30, 2022 and 2021**,** and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and

fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition - Determination of Transaction Price

As described in Note 2 to the consolidated financial statements, the Company recognizes revenue from product sales when obligations under the terms of a contract with the customer are satisfied; generally, this occurs with the transfer of control of the goods to the customers. Certain of the Company's businesses have terms where control of the products transfers to the customer on shipment, while others have terms where control transfers to the customer on delivery. Revenue reflects the total consideration to which management expects to be entitled, in exchange for delivery of products or services, net of variable consideration. Variable consideration includes customer programs and incentive offerings, including pricing arrangements, rebates and other volume-based incentives. Management records reductions to revenue for estimated variable consideration at the time it records the sale. Net sales totaled $942.3 million for the year ended June 30, 2022.

The principal consideration for our determination that performing procedures relating to revenue recognition, specifically the determination of the transaction price, is a critical audit matter is the significant audit effort in performing procedures related to management's determination of the transaction price.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over the determination of the transaction price. These procedures also included, among others, i) testing revenue transactions by evaluating the settlement of invoices and credit memos, ii) tracing transactions not settled to a detailed listing of accounts receivable, iii) on a test basis, testing management's process for determining the transaction price for the sale of goods from contracts with customers, iv) testing credit memos issued during the year, v) confirming a sample of outstanding customer invoice balances at year end and, for confirmations not returned, obtaining and inspecting source documents, including purchase orders, invoices, sales contracts, proof of delivery, and subsequent cash receipts, where applicable, and vi) testing the completeness and accuracy of data provided by management.

/s/ PricewaterhouseCoopers LLP
Florham Park, New Jersey
August 24, 2022

We have served as the Company's auditor since 1998.

PHIBRO ANIMAL HEALTH CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

For the Year Ended June 30	2022	2021	2020
	(in thousands, except per share amounts)		
Net sales	$ 942,261	$ 833,350	$ 800,354
Cost of goods sold	656,861	561,973	543,472
Gross profit	285,400	271,377	256,882
Selling, general and administrative expenses	206,414	196,509	187,688
Operating income	78,986	74,868	69,194
Interest expense, net	11,875	12,880	12,856
Foreign currency (gains) losses, net	(5,216)	(4,480)	826
Income before income taxes	72,327	66,468	55,512
Provision for income taxes	23,152	12,083	21,960
Net income	$ 49,175	$ 54,385	$ 33,552
Net income per share			
basic	$ 1.21	$ 1.34	$ 0.83
diluted	$ 1.21	$ 1.34	$ 0.83
Weighted average common shares outstanding			
basic	40,504	40,473	40,454
diluted	40,504	40,504	40,504

The accompanying notes are an integral part of these consolidated financial statements

PHIBRO ANIMAL HEALTH CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the Year Ended June 30	2022	2021	2020
		(in thousands)	
Net income	$ 49,175	$ 54,385	$ 33,552
Change in fair value of derivative instruments	21,681	12,658	(12,854)
Foreign currency translation adjustment	(18,939)	3,643	(32,513)
Unrecognized net pension gains (losses)	(4,235)	2,598	(2,521)
(Provision) benefit for income taxes	(4,327)	(3,807)	3,684
Other comprehensive income (loss)	(5,820)	15,092	(44,204)
Comprehensive income (loss)	$ 43,355	$ 69,477	$ (10,652)

The accompanying notes are an integral part of these consolidated financial statements

PHIBRO ANIMAL HEALTH CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

As of	2022	2021
	(in thousands, except share and per share amounts)	
ASSETS		
Cash and cash equivalents	$ 74,248	$ 50,212
Short-term investments	17,000	43,000
Accounts receivable, net	166,537	146,852
Inventories, net	259,158	216,312
Other current assets	49,289	42,533
Total current assets	566,232	498,909
Property, plant and equipment, net	165,490	154,706
Intangibles, net	63,861	62,282
Goodwill	53,226	52,679
Other assets	82,890	72,749
Total assets	$ 931,699	$ 841,325
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current portion of long-term debt	$ 15,000	$ 9,375
Accounts payable	95,596	68,362
Accrued expenses and other current liabilities	80,236	86,379
Total current liabilities	190,832	164,116
Revolving credit facility	145,000	95,000
Long-term debt	272,925	287,710
Other liabilities	60,500	55,970
Total liabilities	669,257	602,796
Commitments and contingencies (Note 13)		
Common stock, par value $0.0001 per share; 300,000,000 Class A shares authorized, 20,337,574 shares issued and outstanding at June 30, 2022 and June 30, 2021; 30,000,000 Class B shares authorized, 20,166,034 shares issued and outstanding at June 30, 2022 and June 30, 2021	4	4
Preferred stock, par value $0.0001 per share; 16,000,000 shares authorized, no shares issued and outstanding	—	—
Paid-in capital	135,803	135,803
Retained earnings	247,748	218,015
Accumulated other comprehensive loss	(121,113)	(115,293)
Total stockholders' equity	262,442	238,529
Total liabilities and stockholders' equity	$ 931,699	$ 841,325

The accompanying notes are an integral part of these consolidated financial statements

PHIBRO ANIMAL HEALTH CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Year Ended June 30	2022	2021	2020
		(in thousands)	
OPERATING ACTIVITIES			
Net income	$ 49,175	$ 54,385	$ 33,552
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	32,705	31,885	32,341
Amortization of debt issuance costs	590	833	882
Stock-based compensation	—	1,129	2,259
Acquisition-related items	316	—	(2,433)
Deferred income taxes	(806)	(2,183)	8,125
(Gain) on sale of investment	(1,203)	—	—
Foreign currency (gains), net	(4,808)	(9,718)	(2,540)
Other	319	1,844	818
Changes in operating assets and liabilities, net of business acquisitions:			
Accounts receivable, net	(23,625)	(18,209)	28,713
Inventories, net	(46,999)	(12,498)	(12,930)
Other current assets	(1,804)	(1,631)	(11,137)
Other assets	(1,721)	(1,898)	(2,121)
Accounts payable	26,358	3,176	(7,672)
Accrued expenses and other liabilities	3,152	1,191	(8,509)
Net cash provided by operating activities	31,649	48,306	59,348
INVESTING ACTIVITIES			
Purchases of short-term investments	(64,100)	(74,000)	(80,000)
Maturities of short-term investments	90,100	86,000	49,000
Capital expenditures	(37,044)	(29,320)	(34,045)
Business acquisitions	(13,511)	—	(54,549)
Sale of investment	1,353	—	—
Other, net	620	(1,260)	(796)
Net cash used by investing activities	(22,582)	(18,580)	(120,390)
FINANCING ACTIVITIES			
Revolving credit facility borrowings	297,000	317,500	243,000
Revolving credit facility repayments	(247,000)	(391,500)	(170,000)
Proceeds from long-term debt	—	300,000	—
Payments of long-term debt and other	(9,375)	(220,625)	(12,646)
Payment of contingent consideration	(4,840)	—	—
Debt issuance costs	—	(2,940)	—
Dividends paid	(19,442)	(19,430)	(19,418)
Net cash provided (used) by financing activities	16,343	(16,995)	40,936
Effect of exchange rate changes on cash	(1,374)	1,138	(1,124)
Net increase in cash and cash equivalents	24,036	13,869	(21,230)
Cash and cash equivalents at beginning of period	50,212	36,343	57,573
Cash and cash equivalents at end of period	$ 74,248	$ 50,212	$ 36,343
Supplemental cash flow information			
Interest paid, net	$ 11,159	$ 10,808	$ 11,577
Income taxes paid, net	17,854	19,395	20,866
Non-cash investing and financing activities			
Property, plant and equipment and capital lease additions	2,953	2,957	4,353

The accompanying notes are an integral part of these consolidated financial statements

PHIBRO ANIMAL HEALTH CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(in thousands, except share and per share amounts)

	Shares of Common Stock	Common Stock	Preferred Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
As of June 30, 2019	40,453,608	$ 4	$ —	$ 133,266	$ 168,926	$ (86,181)	$ 216,015
Comprehensive income (loss)	—	—	—	—	33,552	(44,204)	(10,652)
Dividends declared ($0.48 per share)	—	—	—	—	(19,418)	—	(19,418)
Stock-based compensation expense	—	—	—	2,259	—	—	2,259
As of June 30, 2020	40,453,608	$ 4	$ —	$ 135,525	$ 183,060	$ (130,385)	$ 188,204
Comprehensive income (loss)	—	—	—	—	54,385	15,092	69,477
Share issued pursuant to stock incentive plan	50,000	—	—	—	—	—	—
Dividends declared ($0.48 per share)	—	—	—	—	(19,430)	—	(19,430)
Stock-based compensation expense	—	—	—	1,129	—	—	1,129
Other	—	—	—	(851)	—	—	(851)
As of June 30, 2021	40,503,608	$ 4	$ —	$ 135,803	$ 218,015	$ (115,293)	$ 238,529
Comprehensive income (loss)	—	—	—	—	49,175	(5,820)	43,355
Dividends declared ($0.48 per share)	—	—	—	—	(19,442)	—	(19,442)
As of June 30, 2022	40,503,608	$ 4	$ —	$ 135,803	$ 247,748	$ (121,113)	$ 262,442

The accompanying notes are an integral part of these consolidated financial statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except per share amounts)

1. Description of Business

Phibro Animal Health Corporation ("Phibro" or "PAHC") and its subsidiaries (together, the "Company") is a diversified global developer, manufacturer and marketer of a broad range of animal health and mineral nutrition products for food and companion animals including poultry, swine, dairy and beef cattle, aquaculture and dogs. The Company is also a manufacturer and marketer of performance products for use in the personal care, industrial chemical and chemical catalyst industries. Unless otherwise indicated or the context requires otherwise, references in this report to "we," "our," "us," and similar expressions refer to Phibro and its subsidiaries.

2. Summary of Significant Accounting Policies and New Accounting Standards

Principles of Consolidation and Basis of Presentation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and include the accounts of Phibro and its consolidated subsidiaries. Intercompany balances and transactions have been eliminated from the consolidated financial statements. The decision whether or not to consolidate an entity requires consideration of majority voting interests, as well as effective control over the entity.

We present our financial statements on the basis of our fiscal year ending June 30. All references to years in these consolidated financial statements refer to the fiscal year ending or ended on June 30 of that year.

Risks and Uncertainties

The COVID-19 pandemic continues to directly or indirectly impact our business, results of operations and financial condition. New information may continue to emerge concerning COVID-19, and the actions required to contain or treat it may affect the duration and severity of the pandemic. The pandemic may continue to have significant economic impacts on customers, suppliers and markets. The pandemic could affect our future revenues, expenses, reserves and allowances, manufacturing operations and employee-related costs. Our financial statements include estimates of the effects of COVID-19 and there may be changes to those estimates in future periods.

The issue of the potential for increased bacterial resistance to certain antibiotics used in certain food-producing animals is the subject of discussions on a worldwide basis and, in certain instances, has led to government restrictions on or banning of the use of antibiotics in food-producing animals. The sale of antibiotics and antibacterials is a material portion of our business. Should product bans or restrictions, public perception, competition or other developments result in restrictions on the sale of such products, it could have a material adverse effect on our financial position, results of operations and cash flows.

An outbreak of disease carried by food animals, which could lead to the widespread death or precautionary destruction of food animals as well as reduced consumption and demand for animal protein, could adversely affect demand for our products. Such occurrences could have a material adverse effect on our financial condition, results of operations and cash flows.

The testing, manufacturing, and marketing of certain of our products are subject to extensive regulation by numerous government authorities in the United States and other countries.

We have significant assets in Israel, Brazil and other locations outside of the United States and a significant portion of our sales and earnings are attributable to operations conducted abroad. Our assets, results of operations and future prospects are subject to currency exchange fluctuations and restrictions, energy shortages, other economic developments, political or social instability in some countries, and uncertainty of, and governmental control over, commercial rights, which could result in a material adverse effect on our financial position, results of operations and cash flows.

We are subject to environmental laws and regulations governing the use, storage, handling, generation, treatment, emission, release, discharge and disposal of certain materials and wastes, the remediation of contaminated soil and groundwater, the manufacture, sale and use of regulated materials, including pesticides, and the health and safety of

employees. As such, the nature of our current and former operations and those of our subsidiaries expose Phibro and our subsidiaries to the risk of claims with respect to such matters.

Our business could be impacted by economic sanctions, bans, boycotts, or broader military conflicts that result from the armed conflict between Russia and Ukraine. Other potential impacts include supply chain and logistics disruptions, macroeconomic impacts from the exclusion of Russian financial institutions from the global banking system, volatility in foreign exchange rates and interest rates, inflationary pressures on raw materials and energy, as well as heightened cybersecurity threats.

Use of Estimates

The Company's consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (GAAP). Preparation of these financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. Actual results could differ from these estimates. Estimates are used when accounting for the valuation of intangible assets, depreciation and amortization periods of long-lived and intangible assets, recoverability of long-lived and intangible assets and goodwill, realizability of deferred income tax assets, sales discounts, rebates, allowances and incentives, contingencies, employee compensation and actuarial assumptions related to our pension plans. We regularly evaluate our estimates and assumptions using historical experience and other factors. Our estimates are based on complex judgments, probabilities and assumptions that we believe to be reasonable.

Revenue Recognition

We recognize revenue from product sales when obligations under the terms of a contract with the customer are satisfied; generally, this occurs with the transfer of control of the goods to the customers. Certain of our businesses have terms where control of the underlying product transfers to the customer on shipment, while others have terms where control transfers to the customer on delivery.

Revenue reflects the total consideration to which we expect to be entitled in exchange for delivery of products or services, net of variable consideration. Variable consideration includes customer programs and incentive offerings, including pricing arrangements, rebates and other volume-based incentives. We record reductions to revenue for estimated variable consideration at the time we record the sale. Our estimates for variable consideration reflect the amount by which we expect variable consideration to affect the revenue recognized. Such estimates are generally based on contractual terms and historical experience, and are adjusted to reflect future expectations as new information becomes available. Historically, we have not had significant adjustments to our estimates of variable compensation. Sales returns and product recalls have been insignificant and infrequent due to the nature of the products we sell.

Net sales include shipping and handling fees billed to customers. The associated costs are considered fulfillment activities and are included in costs of goods sold in the consolidated statements of operations when the related revenue is recognized. Net sales exclude value-added and other taxes based on sales.

Cash and Cash Equivalents

Cash equivalents include highly liquid investments with maturities of three months or less when purchased. Cash and cash equivalents held at financial institutions may at times exceed insured amounts. We believe we mitigate such risk by investing in or through major financial institutions.

Short-term Investments

Short-term investments include highly liquid investments with maturities greater than three months and less than one year at the time of purchase. We classify these investments as held to maturity and we record the related interest income as earned. We determine the appropriate balance sheet classification at the time of purchase and at each balance sheet date. Investments held at financial institutions may at times exceed insured amounts. We believe we mitigate such risk by investing in or through major financial institutions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Accounts Receivable and Reserve for Credit Losses

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. We grant credit terms in the normal course of business and generally do not require collateral or other security to support credit sales. Our ten largest customers represented, in aggregate, approximately 16% of accounts receivable at June 30, 2022 and 2021.

The reserve for credit losses is our best estimate of the credit losses in existing accounts receivable. We monitor the financial performance, historical and expected collection patterns, and creditworthiness of our customers so that we can properly assess and respond to changes in their credit profile. We also monitor domestic and international economic conditions for the potential future effect on our customers. Past due balances are reviewed individually for collectability. Account balances are charged against the reserve when we determine it is probable the receivable will not be recovered.

Inventories

Inventories are valued at the lower of cost or net realizable value. Cost is determined principally under weighted average and standard cost methods, which approximate first-in, first-out (FIFO) cost. Obsolete and unsalable inventories, if any, are reflected at estimated net realizable value. Inventory costs include materials, direct labor and manufacturing overhead.

Property, Plant and Equipment

Property, plant and equipment are stated at cost.

Depreciation is charged to results of operations using the straight-line method based upon the assets' estimated useful lives, ranging from two to thirty years for buildings and improvements, and three to ten years for machinery and equipment. We capitalize costs that extend the useful life or productive capacity of an asset. Repair and maintenance costs are expensed as incurred. In the case of disposals, the assets and related accumulated depreciation are removed from the accounts, and the net amounts, less proceeds from disposal, are included in the consolidated statements of operations.

Leases

We determine at the inception of an arrangement whether the arrangement contains a lease. If an arrangement contains a lease, we assess the lease term when the underlying asset is available for use ("lease commencement"). Individual lease terms reflect the non-cancellable period of the lease, reasonably certain renewal periods and consideration of termination options. We determine the lease classification as either operating or financing at lease commencement, which governs the pattern of expense recognition and presentation in our consolidated financial statements. Our current lease portfolio only includes operating leases.

We recognize a right-of-use ("ROU") asset and a corresponding lease liability at lease commencement for leases with terms exceeding twelve months. Short-term leases with terms of twelve months or less are not recognized on the consolidated balance sheet and lease payments are recognized on a straight-line basis over the term.

The values of the ROU assets and lease liabilities are calculated based on the present value of the fixed payment obligations over the lease term, using our incremental borrowing rate ("IBR"), determined at lease commencement. The IBR reflects the rate of interest we would expect to pay on a secured basis to borrow an amount equal to the lease payments under similar terms. The IBR incorporates the term and economic environment of the respective lease arrangements.

We have elected to account for lease and non-lease components together as a single lease component and include fixed payment obligations related to such non-lease components in the measurement of ROU assets and lease liabilities. Fixed lease payments are recognized on a straight-line basis over the lease term. Variable lease payments can include index-based lease payments, real estate taxes, maintenance costs, utilization charges and other non-lease services paid to lessors and are not determinable at lease commencement. Variable lease payments are not included in the measurement of ROU assets and lease liabilities and are recognized in the period incurred.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Capitalized Software Costs

We capitalize costs to obtain, develop and implement software for internal use. Amounts paid to third parties and costs of internal employees who are directly associated with the software project are also capitalized, depending on the stage of development.

We expense software costs that do not meet the capitalization criteria. Capitalized software costs are included in property, plant and equipment on the consolidated balance sheets and are amortized on a straight-line basis over three to seven years.

Debt Issuance Costs

Costs and original issue discounts or premiums related to issuance or modification of our debt are deferred on the consolidated balance sheet and amortized over the lives of the respective debt instruments. Amortization of debt issuance costs is included in interest expense in the consolidated statements of operations.

Business Combinations

Our consolidated financial statements reflect the operations of an acquired business beginning as of the date of acquisition. Assets acquired and liabilities assumed are recorded at their fair values at the date of acquisition; goodwill is recorded for any excess of the purchase price over the fair values of the net assets acquired.

Significant judgment may be required to determine the fair values of certain tangible and intangible assets and in assigning their respective useful lives. Significant judgment also may be required to determine the fair values of contingent consideration, if any. We typically utilize third-party valuation specialists to assist us in determining fair values of significant tangible and intangible assets and contingent consideration. The fair values are based on available historical information and on future expectations and assumptions deemed reasonable by management, but are inherently uncertain. We typically use an income method to measure the fair value of intangible assets, based on forecasts of the expected future cash flows attributable to the respective assets. Significant estimates and assumptions inherent in the valuations reflect consideration of other marketplace participants and include the amount and timing of future cash flows, specifically the expected revenue growth rate applied to the cash flows. Unanticipated market or macroeconomic events and circumstances could affect the accuracy or validity of the estimates and assumptions. Determining the useful life of an intangible asset also requires judgment. Our estimates of the useful lives of intangible assets primarily are based on a number of factors including the competitive environment, underlying product life cycles, operating plans and the macroeconomic environment of the countries in which the products are sold. Intangible assets are amortized over their estimated lives. Intangible assets associated with acquired in-process research and development activities ("IPR&D") are not amortized until a product is available for sale and regulatory approval is obtained.

Long-Lived Assets and Goodwill

We periodically review our long-lived and amortizable intangible assets for impairment and assess whether significant events or changes in business circumstances indicate that the carrying value of the assets may not be recoverable. Such circumstances may include a significant decrease in the market price of an asset, a significant adverse change in the manner in which the asset is being used or in its physical condition or a history of operating or cash flow losses associated with the use of an asset. We recognize an impairment loss when the carrying amount of an asset exceeds the anticipated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss is the excess of the asset's carrying value over its fair value. In addition, we periodically reassess the estimated remaining useful lives of our long-lived and amortizable intangible assets. Changes to estimated useful lives would affect the amount of depreciation and amortization recorded in the consolidated statements of operations.

We periodically review our indefinite-lived intangible assets for impairment and assess whether significant events or changes in business circumstances indicate that the carrying value of the assets may not be recoverable. We recognize an impairment loss when the carrying amount of an asset exceeds the anticipated future discounted cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss is the excess of the asset's carrying value over its fair value. We assess indefinite-lived intangibles for impairment annually during our fourth quarter, or more frequently if impairment indicators exist.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Goodwill represents the excess of the purchase price over the fair value of the identifiable net assets acquired in a business combination. We assess goodwill for impairment annually during our fourth quarter, or more frequently if impairment indicators exist. Impairment exists when the carrying amount of goodwill exceeds its implied fair value. We may elect to assess our goodwill for impairment using a qualitative or a quantitative approach, to determine whether it is more likely than not that the fair value of goodwill is greater than its carrying value. During the three months ended June 30, 2022, we tested goodwill using the quantitative approach and determined goodwill was not impaired. We have not recorded any goodwill impairment charges in the periods included in the consolidated financial statements.

Foreign Currency Translation

We generally use local currency as the functional currency to measure the financial position and results of operations of each of our international subsidiaries. We translate assets and liabilities of these operations at the exchange rates in effect at the balance sheet date. We translate income statement accounts at the average rates of exchange prevailing during the period. Translation adjustments that arise from the use of differing exchange rates from period to period are included as a component of accumulated other comprehensive income (loss) in stockholders' equity. Certain of our Israeli operations have designated the U.S. dollar as their functional currency. Gains and losses arising from re-measurement of local currency accounts into U.S. dollars are included in determining net income.

Comprehensive Income

Comprehensive income consists of net income and the changes in: (i) the fair value of derivative instruments that qualify for hedge accounting; (ii) foreign currency translation adjustments; (iii) unrecognized net pension gains (losses); and (iv) the related (provision) benefit for income taxes.

Derivative Financial Instruments

We record all derivative financial instruments on the consolidated balance sheets at fair value. Changes in the fair value of derivatives are recorded in results of operations or other comprehensive income (loss), depending on whether a derivative is designated and effective as part of a hedge transaction and, if so, the type of hedge transaction. Gains and losses on derivative instruments designated and effective as part of a hedge transaction are included in the results of operations in the periods in which operations are affected by the underlying hedged item.

From time to time, we use certain derivative instruments to mitigate the risk associated with certain economic factors, such as exchange rates and interest rates, which may potentially affect our future cash flows. As of June 30, 2022, we used (i) foreign currency option contracts to mitigate certain exposures related to changes in foreign currency exchange rates on forecasted inventory purchases, and (ii) interest rate swaps on $300,000 of notional principal to manage future cash flow exposure resulting from variable interest rates on that amount of debt. To qualify a derivative as a hedge, we document the nature and relationships between hedging instruments and hedged items, the prospective effectiveness of the hedging instrument as well as the ultimate effectiveness, the risk-management objectives, the strategies for undertaking the various hedge transactions and the methods of assessing hedge effectiveness. We do not engage in trading or other speculative uses of financial instruments.

Environmental Liabilities

Expenditures for ongoing compliance with environmental regulations are expensed or capitalized as appropriate. We capitalize expenditures made to extend the useful life or productive capacity of an asset, including expenditures that prevent future environmental contamination. Other expenditures are expensed as incurred and are recorded in selling, general and administrative expenses in the consolidated statements of operations. We record the expense and related liability in the period an environmental assessment indicates remedial efforts are probable and the costs can be reasonably estimated. Estimates of the liability are based upon currently available facts, existing technology and presently enacted laws and regulations taking into consideration the likely effects of inflation and other societal and economic factors. All available evidence is considered, including prior experience in remediation of contaminated sites, other companies' experiences and data released by the U.S. Environmental Protection Agency and other organizations. The estimated liabilities are not discounted. We record anticipated recoveries under existing insurance contracts if probable.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Income Taxes

The provision for income taxes includes U.S. federal, state, and foreign income taxes and foreign withholding taxes. Our annual effective income tax rate is determined based on our income, statutory tax rates and tax planning opportunities available in the various jurisdictions in which we operate and the tax effects of items treated differently for tax purposes than for financial reporting purposes. Tax law requires certain items be included in the tax return at different times than the items are reflected in the financial statements. Some of these differences are permanent, such as expenses that are not deductible in our tax return, and some differences are temporary, reversing over time, such as depreciation expense. These temporary differences give rise to deferred tax assets and liabilities. Deferred tax assets generally represent the tax effect of items that can be used as a tax deduction or credit in future years for which we have already recorded the tax benefit in our income statement. Deferred tax liabilities generally represent the tax effect of items recorded as tax expense in our income statement for which payment has been deferred, the tax effect of expenditures for which a deduction has already been taken in our tax return but has not yet been recognized in our income statement, and the tax effect of assets recorded at fair value in business combinations for which there was no corresponding tax basis adjustment.

The recognition and measurement of a tax position is based on management's best judgment given the facts, circumstances and information available at the reporting date. Inherent in determining our annual effective income tax rate are judgments regarding business plans, planning opportunities and expectations about future outcomes. Realization of certain deferred tax assets, primarily net operating loss carryforwards, is dependent upon generating sufficient future taxable income in the appropriate jurisdiction prior to the expiration of the carryforward periods. We establish valuation allowances for deferred tax assets when the amount of expected future taxable income is not likely to support the use of the deduction or credit.

We may take tax positions that management believes are supportable, but are potentially subject to successful challenge by the applicable taxing authority in the jurisdictions where we operate. We evaluate our tax positions and establish liabilities in accordance with the applicable accounting guidance on uncertainty in income taxes. We review these tax uncertainties in light of changing facts and circumstances, such as the progress of tax audits, and adjust them accordingly.

Because there are a number of estimates and assumptions inherent in calculating the various components of our income tax provision, future events such as changes in tax legislation, the geographic mix of earnings, completion of tax audits or earnings repatriation plans could have an effect on those estimates and our effective income tax rate.

Advertising

Advertising and marketing costs are expensed as incurred and are reflected in selling, general and administrative expenses.

Research and Development Expenditures

Research and development expenditures are expensed as incurred and are recorded in selling, general and administrative expenses in the consolidated statements of operations. Most of our manufacturing facilities have scientists and technicians on staff involved in product development, quality assurance and providing technical services to customers. Research, development and technical service efforts are conducted at various facilities. Our animal health research and development activities relate to: fermentation development and microbiological strain improvement; vaccine development; chemical synthesis and formulation development; nutritional specialties development; and ethanol-related products.

Stock-Based Compensation

We recognize expense for stock-based compensation to employees, including grants of restricted stock units, over the requisite service period based on the grant date fair value of the awards. We determine the fair value of restricted stock units using the Monte Carlo simulation model. The model uses historical and current market data to estimate the fair value. The model incorporates various assumptions such as the risk-free interest rate, expected volatility, expected dividend yield and expected life of the awards.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Net Income per Share and Weighted Average Shares

Basic net income per share is calculated by dividing net income by the weighted average number of common shares outstanding during the reporting period.

Diluted net income per share is calculated by dividing net income by the weighted average number of common shares outstanding during the reporting period after giving effect to potential dilutive common shares resulting from the assumed vesting of restricted stock units. All common share equivalents were included in the calculation of diluted net income per share in the periods included in the consolidated financial statements.

For the Year Ended June 30	2022	2021	2020
Net income	$ 49,175	$ 54,385	$ 33,552
Weighted average number of shares – basic	40,504	40,473	40,454
Dilutive effect of restricted stock units	—	31	50
Weighted average number of shares – diluted	40,504	40,504	40,504
Net income per share			
basic	$ 1.21	$ 1.34	$ 0.83
diluted	$ 1.21	$ 1.34	$ 0.83

New Accounting Standards

Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2021-10, *Government Assistance (Topic 832), Disclosures by Business Entities about Government Assistance* has established annual disclosure requirements over transactions with a government that are accounted for by applying a grant accounting model. The disclosures include the nature of the transactions and the related accounting policy used to account for the transactions, the line items and amounts included in the consolidated balance sheet and consolidated statement of operations, and the significant terms and conditions of the transactions, including commitments and contingencies. The disclosures are required for the annual periods beginning after December 15, 2021. We intend to include these disclosures for the year ending June 30, 2023.

ASU 2021-08, *Business Combinations (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, requires revenue contract assets and liabilities acquired in a business combination be recognized and measured under the revenue standard provided in Topic 606. Under previous guidance, revenue contract assets and liabilities would have been measured at fair value. The ASU is required to be adopted for annual periods beginning after December 15, 2022. Early adoption is permitted and would be applied retrospectively in the year adopted. We adopted the standard in fiscal year 2022. There were no contract assets or liabilities that required measurement for our 2022 acquisition.

ASU 2020-04 and 2021-01, *Reference Rate Reform (Topic 848)*, provide optional expedients and exceptions to GAAP guidance, if certain criteria are met, for contracts, hedging relationships and derivative instruments that reference the London Interbank Offered Rate (LIBOR) and other interbank offered rates expected to be discontinued or modified by rate reform. The overall purpose of Topic 848 is to ease the financial reporting burdens related to the expected market transition to alternative reference rates. These ASUs may be applied prospectively to contract modifications made and hedging relationships entered into on or before December 31, 2022. We do not expect any contract modifications on or before December 31, 2022.

ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, removed certain exceptions and amended certain requirements in the existing income tax guidance to ease accounting requirements. ASU 2019-12 was effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, and must be applied on a retrospective basis. The adoption did not have a material effect on our consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

3. Acquisition

In February 2022, we acquired a business in Brazil, which develops, manufactures and markets processing aids used in the ethanol fermentation industry, for an aggregate cash payment of $13,511. We accounted for the acquisition as a business combination in accordance with ASC 805, Business Combinations. Pro forma information giving effect to the acquisition has not been provided because the results are not material to the consolidated financial statements. Definite-lived intangible assets of $10,833 were recognized at acquisition and included developed products, tradename, and non-compete agreements. The definite-lived intangible assets will be amortized over periods ranging from 4 to 13 years. The remaining net assets acquired included accounts receivable, inventories, prepaid and other assets, goodwill, accounts payable and accrued expenses. Goodwill is deductible for income tax purposes. The business is included in the MFAs and other product category within the Animal Health segment.

In August 2019, we acquired the business and assets of Osprey Biotechnics, Inc. ("Osprey"). We acquired assets used in Osprey's business, including intellectual property, working capital and property, plant and equipment, for an aggregate cash payment of $54,549. The acquisition agreement included contingent consideration. Total consideration recognized included a $7,533 liability for the estimated contingent consideration at acquisition. During the year ended June 30, 2020, the contingent consideration was reduced to the minimum amount of $4,840 and an adjustment of $2,988 was recorded as a reduction to selling, general and administrative expenses. The contingent consideration of $4,840 was paid during the year ended June 30, 2022.

4. Statements of Operations—Additional Information

Disaggregated revenue, deferred revenue and customer payment terms

We develop, manufacture and market a broad range of products for food and companion animals including poultry, swine, beef and dairy cattle, aquaculture, and dogs. The products help prevent, control and treat diseases, enhance nutrition to help improve animal health and well-being, and contribute to balanced mineral nutrition. The animal health and mineral nutrition products are sold directly to integrated poultry, swine and cattle integrators and through animal feed manufacturers, wholesalers and distributors. The animal health industry and demand for many of the animal health products in a particular region are affected by changing disease pressures and by weather conditions, as product usage follows varying weather patterns and seasons. Our operations are primarily focused in regions where the majority of livestock production is consolidated in large commercial farms.

We have a diversified portfolio of products that are classified within our three business segments — Animal Health, Mineral Nutrition and Performance Products. Each segment has its own dedicated management and sales team.

Animal Health

The Animal Health business develops, manufactures and markets products in three main categories:

- MFAs and Other: MFAs and other products primarily consist of concentrated medicated products that are administered through animal feeds, commonly referred to as Medicated Feed Additives ("MFAs"). Specific product classifications include antibacterials, which inhibit the growth of pathogenic bacteria that cause bacterial infections in animals; anticoccidials, which inhibit the growth of coccidia (parasites) that damage the intestinal tract of animals; and other related products.
- Nutritional Specialties: Nutritional specialty products enhance nutrition to help improve health and performance in areas such as immune system function and digestive health. We are also a developer, manufacturer and marketer of microbial products and bioproducts for a variety of applications serving animal health and nutrition, environmental, industrial and agricultural customers.
- Vaccines: Our vaccines are primarily focused on preventing diseases in poultry and swine. They protect animals from either viral or bacterial disease challenges. We develop, manufacture and market conventionally licensed and autogenous vaccine products and produce and market adjuvants to vaccine manufacturers. We have developed and market an innovative and proprietary delivery platform for vaccines.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Mineral Nutrition

The Mineral Nutrition business is comprised of formulations and concentrations of trace minerals such as zinc, manganese, copper, iron and other compounds, with a focus on customers in North America. Our customers use these products to fortify the daily feed requirements of their animals' diets and maintain an optimal balance of trace elements in each animal. We manufacture and market a broad range of mineral nutrition products for food animals including poultry, swine and beef and dairy cattle.

Performance Products

The Performance Products business manufactures and markets specialty ingredients for use in the personal care, industrial chemical and chemical catalyst industries, predominantly in the United States.

The following tables present our revenues disaggregated by major product category and geographic region:

Net Sales by Product Type

For the Year Ended June 30	2022	2021	2020
Animal Health			
MFAs and other	$ 361,538	$ 330,017	$ 322,300
Nutritional specialties	157,196	142,760	129,264
Vaccines	88,321	72,939	75,340
Total Animal Health	$ 607,055	$ 545,716	$ 526,904
Mineral Nutrition	259,512	220,560	214,412
Performance Products	75,694	67,074	59,038
Total	$ 942,261	$ 833,350	$ 800,354

Net Sales by Region

For the Year Ended June 30	2022	2021	2020
United States	$ 561,803	$ 494,889	$ 471,938
Latin America and Canada	191,047	166,325	158,939
Europe, Middle East and Africa	122,480	114,131	112,179
Asia Pacific	66,931	58,005	57,298
Total	$ 942,261	$ 833,350	$ 800,354

Net sales by region are based on country of destination.

Deferred revenue was $2,051 and $3,674 as of June 30, 2022 and June 30, 2021, respectively. Accrued expenses and other current liabilities included $822 and $1,560 of the total deferred revenue as of June 30, 2022 and 2021, respectively. The deferred revenue resulted primarily from certain customer arrangements, including technology licensing fees and discounts on future product sales. The transaction price associated with our deferred revenue arrangements is generally based on the stand-alone sales prices of the individual products or services.

Our customer payment terms generally range from 30 to 120 days globally and do not include any significant financing components. Payment terms vary based on industry and business practices within the regions in which we operate. Our average worldwide collection period for accounts receivable is approximately 60 days after the revenue is recognized.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Additional Information

For the Year Ended June 30	2022	2021	2020
Interest expense, net			
Term loan	$ 8,962	$ 7,951	$ 7,751
Revolving credit facility	2,956	3,649	5,317
Amortization of debt issuance costs	590	833	882
Refinancing expense	—	1,020	—
Other	183	265	663
Interest expense	12,691	13,718	14,613
Interest income	(816)	(838)	(1,757)
	$ 11,875	$ 12,880	$ 12,856

For the Year Ended June 30	2022	2021	2020
Depreciation and amortization			
Depreciation of property, plant and equipment	$ 23,781	$ 23,165	$ 23,250
Amortization of intangible assets	8,924	8,715	8,869
Amortization of other assets	—	5	222
	$ 32,705	$ 31,885	$ 32,341

Depreciation of property, plant and equipment includes amortization of capitalized software costs of $1,047, $1,254 and $1,038 during 2022, 2021 and 2020, respectively.

Future amortization of intangible assets as of June 30, 2022, is expected to be:

For the Year Ended June 30	
2023	$ 9,614
2024	9,375
2025	7,769
2026	6,805
2027	6,556
Thereafter	23,742
Total	$ 63,861

For the Year Ended June 30	2022	2021	2020
Research and development expense	$ 20,832	$ 17,759	$ 13,738

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

5. Balance Sheets—Additional Information

As of June 30	2022	2021
Accounts receivable, net		
Trade accounts receivable	$ 170,047	$ 150,659
Reserve for credit losses	(3,510)	(3,807)
	$ 166,537	$ 146,852

As of June 30	2022	2021
Reserve for credit losses		
Balance at beginning of period	$ 3,807	$ 3,940
Provision for estimated credit losses	255	105
Effect of changes in exchange rates	(372)	26
Actual credit losses realized	(180)	(264)
Balance at end of period	$ 3,510	$ 3,807

As of June 30	2022	2021
Inventories		
Raw materials	$ 87,030	$ 59,775
Work-in-process	15,468	12,738
Finished goods	156,660	143,799
	$ 259,158	$ 216,312

As of June 30	2022	2021
Property, plant and equipment, net		
Land	$ 11,927	$ 9,994
Buildings and improvements	89,582	80,408
Machinery and equipment	274,298	263,696
Construction in progress	30,648	23,659
	406,455	377,757
Accumulated depreciation	(240,965)	(223,051)
	$ 165,490	$ 154,706

Certain facilities in Israel are on leased land. The leases expire in 2023, 2045 and 2062.

Property, plant and equipment, net includes internal-use software costs, net of accumulated depreciation, of $4,320 and $4,236 at June 30, 2022 and 2021, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of June 30	Weighted-Average Useful Life (Years)	2022	2021
Intangibles, net			
Cost			
Technology	12	$ 94,880	$ 85,016
Product registrations, marketing and distribution rights	9	17,583	17,882
Customer relationships	12	30,246	31,115
Trade names, trademarks and other	5	5,480	3,857
		148,189	137,870
Accumulated amortization			
Technology		(48,723)	(42,083)
Product registrations, marketing and distribution rights		(17,324)	(17,862)
Customer relationships		(15,285)	(12,588)
Trade names, trademarks and other		(2,996)	(3,055)
		(84,328)	(75,588)
		$ 63,861	$ 62,282

As of June 30	2022	2021
Goodwill		
Balance at beginning of period	$ 52,679	$ 52,679
Acquisition	561	—
Effect of changes in exchange rates	(14)	—
Balance at end of period	$ 53,226	$ 52,679

As of June 30	2022	2021
Other assets		
ROU operating lease assets	$ 37,680	$ 32,962
Deferred income taxes	5,849	9,861
Deposits	5,905	5,663
Insurance investments	5,984	5,964
Equity method investments	4,362	4,141
Derivative instruments	12,976	2,696
U.S. pension plan	—	1,184
Debt issuance costs	1,436	1,811
Other	8,698	8,467
	$ 82,890	$ 72,749

We evaluate our investments in equity method investees for impairment if circumstances indicate that the fair value of the investment may be impaired. The assets underlying a $2,735 equity investment are currently idle. We have concluded the investment is not impaired based on expected future operating cash flows and/or disposal value.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of June 30	2022	2021
Accrued expenses and other current liabilities		
Employee related	$ 34,278	$ 35,375
Current operating lease liabilities	6,051	6,618
Commissions and rebates	7,125	6,312
Professional fees	5,493	4,380
Income and other taxes	7,211	6,107
Derivative instruments	—	3,486
Contingent consideration	—	4,840
Restructuring costs	—	735
Insurance-related	1,174	1,176
Other	18,904	17,350
	$ 80,236	$ 86,379

As of June 30	2022	2021
Other liabilities		
Long-term operating lease liabilities	$ 31,508	$ 28,003
Long-term and deferred income taxes	9,264	6,646
Supplemental retirement benefits, deferred compensation and other	7,368	8,382
U.S. pension plan	1,793	—
International retirement plans	4,620	5,345
Other long-term liabilities	5,947	7,594
	$ 60,500	$ 55,970

As of June 30	2022	2021
Accumulated other comprehensive loss		
Derivative instruments	$ 20,891	$ (790)
Foreign currency translation adjustment	(119,034)	(100,095)
Unrecognized net pension losses	(24,208)	(19,973)
(Provision) benefit for income taxes on derivative instruments	(5,281)	97
Benefit for income taxes on long-term intercompany investments	8,166	8,166
Provision for income taxes on net pension losses	(1,647)	(2,698)
	$ (121,113)	$ (115,293)

6. Debt

Term Loans and Revolving Credit Facilities

In April 2021, we entered into an amended and restated credit agreement (the "2021 Credit Agreement") under which we had a term A loan in an aggregate initial principal amount of $300,000 (the "2021 Term A Loan") and a revolving credit facility under which we can borrow up to $250,000, subject to the terms of the agreement (the "2021 Revolver" and together with the 2021 Term A Loan, the "2021 Credit Facilities"). The 2021 Credit Agreement amends and restates the credit agreement entered into in June 2017 (the "2017 Credit Agreement"). The 2021 Credit Facilities were used to refinance all of the Term A loans and revolving credit facility amounts outstanding under the 2017 Credit Agreement and to pay fees and expenses of the transaction. The 2021 Revolver contains a letter of credit facility.

Borrowings under the 2021 Credit Facilities bear interest at rates based on the ratio of the Company and its subsidiaries' net consolidated first lien indebtedness to the Company and its subsidiaries' consolidated EBITDA (the "First Lien Net Leverage Ratio"). The interest rate per annum applicable to the loans under the 2021 Credit Facilities is based on a fluctuating rate of interest equal to the sum of an applicable rate and, at the Company's election from time to time, either (1) a Eurodollar rate determined by reference to LIBOR with a term as selected by the Company, or (2) a base rate determined by reference to the highest of (a) the rate as publicly announced from time to time by Bank of America as its "prime rate," (b) the federal funds effective rate plus 0.50% and (c) the LIBOR daily floating rate plus 1.00%.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In the case of LIBOR and Eurodollar rate loans, if the First Lien Net Leverage Ratio is (i) equal to or greater than 3.50:1.00; (ii) less than 3.50:1.00 but greater than or equal to 2.25:1.00; or, (iii) less than 2.25:1.00, the 2021 Credit Facilities have applicable rates equal to 2.00%; 1.75%; and, 1.50%, respectively. In the case of base rate loans, if the First Lien Net Leverage Ratio is (i) equal to or greater than 3.50:1.00; (ii) less than 3.50:1.00 but greater than or equal to 2.25:1.00; or, (iii) less than 2.25:1.00, the 2021 Credit Facilities have applicable rates equal to 1.00%; 0.75%; and, 0.50%, respectively.

Pursuant to the terms of the 2021 Credit Agreement, the 2021 Credit Facilities are subject to various covenants that, among other things and subject to the permitted exceptions described therein, restrict us and our subsidiaries with respect to: (i) incurring additional debt; (ii) making certain restricted payments or making optional redemptions of other indebtedness; (iii) making investments or acquiring assets; (iv) disposing of assets (other than in the ordinary course of business); (v) creating any liens on our assets; (vi) entering into transactions with affiliates; (vii) entering into merger or consolidation transactions; and (viii) creating guarantee obligations; provided, however, that we are permitted to pay distributions to stockholders out of available cash subject to certain annual limitations and so long as no default or event of default under the 2021 Credit Facilities shall have occurred and be continuing at the time such distribution is declared. Indebtedness under the 2021 Credit Facilities is collateralized by a first priority lien on substantially all assets of Phibro and certain of our domestic subsidiaries. The 2021 Credit Agreement contains an acceleration clause should an event of default (as defined in the agreement) occur. The 2021 Credit Facilities mature in April 2026.

The 2021 Credit Agreement requires, among other things, compliance with financial covenants that permitted: (i) a maximum First Lien Net Leverage Ratio of 4.00:1.00 and (ii) a minimum interest coverage ratio of 3.00:1.00, each calculated on a trailing four-quarter basis. The 2021 Credit Agreement contains an acceleration clause should an event of default (as defined in the 2021 Credit Agreement) occur. As of June 30, 2022, we were in compliance with the financial covenants.

As of June 30, 2022, we had $145,000 in borrowings under the 2021 Revolver and had outstanding letters of credit of $2,479, leaving $102,521 available for borrowings and letters of credit under the 2021 Revolver, subject to restrictions in our 2021 Credit Facilities. We obtain letters of credit in connection with certain regulatory and insurance obligations, inventory purchases and other contractual obligations. The terms of these letters of credit are all less than one year.

In July 2017, we entered into an interest rate swap agreement on $150,000 of notional principal that effectively converts the floating LIBOR portion of our interest obligation on that amount of debt to a fixed interest rate of 1.8325%. The agreement matured in June 2022. We designated the interest rate swap as a highly effective cash flow hedge. For additional details, see “Note 14— Derivatives.”

In March 2020, we entered into an interest rate swap agreement on an additional $150,000 of notional principal that effectively converts the floating LIBOR portion of our interest obligation on that amount of debt to a fixed rate of 0.62%. In July 2022, this agreement increased to a notional principal amount of $300,000 through June 2025, and effectively converts the floating LIBOR portion of our interest obligation on $300,000 of debt to a fixed interest rate of 0.62%. We designated the interest rate swap as a highly effective cash flow hedge. For additional details, see “Note 14 — Derivatives.”

As of June 30, 2022, the interest rates for the 2021 Revolver and the Term A Loan were 3.20% and 2.37%, respectively. The weighted-average interest rates for the 2021 Revolver were 2.08% and 2.21% for the years ended June 30, 2022 and 2021, respectively. The weighted-average interest rates for the Term A Loan were 2.99% and 3.27% for the years ended June 30, 2022 and 2021, respectively.

Long-Term Debt

As of June 30	2022	2021
2021 Term A Loan due April 2026	$ 288,750	$ 298,125
Unamortized debt issuance costs	(825)	(1,040)
	287,925	297,085
Less: current maturities	(15,000)	(9,375)
	$ 272,925	$ 287,710

Aggregate Maturities of Long-Term Debt and Revolver

For the Years Ending June 30	Annual Maturities	Interest Payments
2023	$ 15,000	$ 11,806
2024	16,875	11,287
2025	24,375	10,605
2026	377,500	10,844
Total	$ 433,750	$ 44,542

For purposes of estimating future interest payments until the maturity of the 2021 Credit Facilities, we assumed the 2021 Term A Loan will decrease in accordance with the scheduled debt amortization and the 2021 Revolver continues unchanged at the June 30, 2022, balance. We assumed the March 2020 interest rate swap agreement remains in place through its June 2025 maturity and future interest rates and applicable rates are the same as the rates at June 30, 2022.

7. Leases

Our lease portfolio consists of real estate, vehicles and equipment ROU assets, classified as operating leases. The remaining non-cancelable lease terms, inclusive of renewal options reasonably certain of exercise, range from one to 24 years.

The following table summarizes the ROU assets and the related lease liabilities recorded on the consolidated balance sheet:

As of June 30,	2022	2021	Balance Sheet Classification
Assets:			
Operating lease ROU assets	$ 37,680	$ 32,962	Other Assets
Liabilities:			
Current portion	6,051	6,618	Accrued expenses and other current liabilities
Non-current portion	31,508	28,003	Other liabilities
Total operating lease liabilities	$ 37,559	$ 34,621	

The following table summarizes the composition of net lease expense:

For the Year Ended June 30	2022	2021
Operating lease expense	$ 8,461	$ 7,989
Variable lease expense	1,376	1,176
Short-term lease expense	1,214	873
Total lease expense	$ 11,051	$ 10,038

The following tables include other supplemental information:

For the Year Ended June 30	2022	2021
Operating cash flows used for ROU operating leases	$ 8,642	$ 8,292
Non-cash changes to ROU operating assets and lease liabilities	$ 11,930	$ 16,665

As of June 30	2022	2021
Weighted average remaining lease term (in years) - operating leases	11.46 %	8.42 %
Weighted average discount rate - operating leases	3.66 %	4.04 %

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

At June 30, 2022, maturities of future lease liabilities were:

For the Years Ending June 30,		
2023	$	7,169
2024		5,895
2025		4,556
2026		3,413
2027		2,981
2028 and thereafter		22,129
Total lease payments		46,143
Less: interest		8,584
Total operating lease liabilities	$	37,559

There were no significant future payment obligations related to executed lease agreements for which the related lease had not yet commenced as of June 30, 2022. Our lease agreements do not contain any material restrictive covenants or residual value guarantee provisions.

8. Common Stock, Preferred Stock and Dividends

Preferred stock and common stock at June 30, 2022 and 2021 were:

As of June 30	2022	2021		2022	2021
	Authorized Shares		Par value	Issued and outstanding shares	
Preferred stock	16,000,000	16,000,000	$ 0.0001	—	—
Common stock – Class A	300,000,000	300,000,000	$ 0.0001	20,337,574	20,337,574
Common stock – Class B	30,000,000	30,000,000	$ 0.0001	20,166,034	20,166,034

Holders of our Class B common stock converted zero shares of Class B common stock to Class A common stock in 2022 and 2021.

Common Stock

General

Except as otherwise provided by our amended and restated certificate of incorporation or applicable law, the holders of our Class A common stock and Class B common stock shall vote together as a single class. There are no cumulative voting rights.

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

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

Class A Common Stock

Holders of our Class A common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders.

Holders of our Class A common stock do not have preemptive, subscription or conversion rights. Our Class A common stock is not convertible and there are no redemption or sinking fund provisions applicable to our Class A

common stock. Unless our Board of Directors determines otherwise, we will issue all of our capital stock in uncertificated form.

Class B Common Stock

Holders of our Class B common stock are entitled to 10 votes for each share held of record on all matters submitted to a vote of stockholders. BFI holds all of our outstanding Class B common stock.

Holders of our Class B common stock do not have preemptive or subscription rights. There are no redemption or sinking fund provisions applicable to our Class B common stock.

Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. In addition, each share of Class B common stock will convert automatically into one share of Class A common stock upon any transfer, whether or not for value, except for certain transfers by and among BFI, its affiliates and certain Bendheim family members, as described in the amended and restated certificate of incorporation. Once transferred and converted into Class A common stock, the Class B common stock will not be reissued. In addition, all shares of Class B common stock will automatically convert to shares of Class A common stock when the outstanding shares of Class B common stock and Class A common stock held by BFI, its affiliates and certain Bendheim family members, together, is less than 15% of the total outstanding shares of Class A common stock and Class B common stock, taken as a single class.

Holders of our Class B common stock have the right to require us to register the sales of their shares under the Securities Act, under the terms of an agreement between us and the holders.

Preferred Stock

We do not have any preferred stock outstanding. Our Board of Directors has the authority to issue shares of preferred stock from time to time on terms it may determine, to divide shares of preferred stock into one or more series and to fix the designations, preferences, privileges, and restrictions of preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference, sinking fund terms, and the number of shares constituting any series or the designation of any series to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Dividends

We declared and paid quarterly cash dividends totaling $19,442 for the year ended June 30, 2022, to holders of our Class A common stock and Class B common stock.

9. Stock Incentive Plan

In March 2008, our Board of Directors and stockholders adopted the 2008 Incentive Plan (the “Incentive Plan”). The Incentive Plan provides directors, officers, employees and consultants to the Company with opportunities to purchase common stock pursuant to options that may be granted, and receive grants of restricted stock and other stock-based awards granted, from time to time by the Board of Directors or a committee approved by the Board. The Incentive Plan provides for grants of stock options, stock awards and other incentives for up to 6,630,000 shares. There were 5,081,620 Class A shares available for grant pursuant to the Incentive Plan as of June 30, 2022. There are no outstanding awards as of June 30, 2022.

Restricted Stock Units

In May 2018, PAHC’s Compensation Committee approved the grant of 250,000 restricted stock units (“RSUs”) to an officer of the Company, pursuant to the Incentive Plan, of which 50,000 were subject to time-based vesting and fully vested as of December 31, 2020.

We recognized the total grant date fair value of the RSUs as stock-based compensation expense on a straight-line basis over the vesting period. Stock-based compensation expense related to RSUs for the years ended June 30, 2022, 2021 and 2020 was $0, $1,129 and $2,259, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Stock Options

There was no stock-based compensation expense related to employee stock options in the periods included in the consolidated financial statements and there was no stock option activity during 2022.

10. Related Party Transactions

Certain relatives of Jack C. Bendheim, our Chairman, President and Chief Executive Officer, provided services to the Company as employees or consultants and received aggregate compensation and benefits of approximately $2,203, $1,660 and $1,553 during 2022, 2021 and 2020, respectively. Mr. Bendheim has sole authority to vote shares of our stock owned by BFI Co., LLC, an investment vehicle of the Bendheim family.

11. Employee Benefit Plans

Domestic Pension Plan

We maintain a noncontributory defined benefit pension plan for all domestic nonunion employees employed on or prior to December 31, 2013, who meet certain requirements of age, length of service and hours worked per year. We amended the plan to eliminate credit for future service and compensation increases, effective September 2016. Plan benefits are based upon years of service and average compensation, as defined. The measurement dates for the plan were as of June 30, 2022 and 2021.

Changes in the projected benefit obligation, plan assets and funded status of the plan were:

For the Year Ended June 30	2022	2021
Change in projected benefit obligation		
Projected benefit obligation at beginning of year	$ 77,915	$ 79,353
Interest cost	1,675	1,682
Benefits paid	(2,426)	(2,260)
Actuarial gain	(14,085)	(860)
Projected benefit obligation at end of year	$ 63,079	$ 77,915

For the Year Ended June 30	2022	2021
Change in plan assets		
Fair value of plan assets at beginning of year	$ 79,099	$ 75,791
Actual return on plan assets	(15,387)	4,838
Employer contributions	—	730
Benefits paid	(2,426)	(2,260)
Fair value of plan assets at end of year	$ 61,286	$ 79,099
Asset (Liability) funded status at end of year	$ (1,793)	$ 1,184

The projected benefit obligation for the year ended June 30, 2022, decreased due to a gain from the use of a higher discount rate, partially offset by losses derived from other actuarial assumptions. The projected benefit obligation for the year ended June 30, 2021, decreased due to a net overall gain from the use of a higher discount rate and mortality assumption update, partially offset by a loss from demographic experience. The discount rate used each period is determined with reference to the current long-term bond market rates. The projected benefit obligation also increased each year by the interest cost due to the passage of time and decreased each year by the benefits paid to plan participants.

The actual return on plan assets for the year ended June 30, 2022, was attributable to losses incurred on fixed income securities as domestic interest rates increased during the year. Our investment strategy is to hold a significant portion of our plan assets in fixed income securities with maturities and amounts approximately matching projected future benefit payments.

The funded status is included in other liabilities and other assets in the consolidated balance sheets at June 30, 2022 and 2021, respectively. The Company does not expect to contribute to the plan during 2023. We seek to maintain an

asset balance that meets the long-term funding requirements identified by actuarial projections while also satisfying ERISA fiduciary responsibilities.

Accumulated other comprehensive income (loss) related to the plan was:

For the Year Ended June 30	2022	2021
Accumulated other comprehensive income (loss) related to pension plan		
Balance at beginning of period	$ (19,973)	$ (22,571)
Amortization of net actuarial loss and prior service costs	480	560
Current period net actuarial gain (loss)	(4,715)	2,038
Net change	(4,235)	2,598
Balance at end of period	$ (24,208)	$ (19,973)

Net periodic pension expense was:

For the Year Ended June 30	2022	2021	2020
Interest cost on benefit obligation	$ 1,675	$ 1,682	$ 2,112
Expected return on plan assets	(3,413)	(3,660)	(3,144)
Amortization of net actuarial loss and prior service costs	480	560	515
Net periodic pension income	$ (1,258)	$ (1,418)	$ (517)

Significant actuarial assumptions for the plan were:

For the Year Ended June 30	2022	2021	2020
Discount rate for interest cost	2.2 %	2.2 %	2.2 %
Expected rate of return on plan assets	4.4 %	4.4 %	4.9 %
Discount rate for year-end benefit obligation	4.6 %	2.9 %	2.8 %

The plan used the Aon AA Bond Universe as a benchmark for its discount rate as of June 30, 2022, 2021 and 2020. The discount rate is determined by matching the plan's timing and amount of expected cash outflows to a bond yield curve constructed from a population of AA-rated corporate bond issues that are generally non-callable and have at least $250 million par value outstanding. From this, the discount rate that results in the same present value is calculated.

Estimated future benefit payments are:

For the Year Ended June 30	
2023	$ 3,398
2024	3,606
2025	3,758
2026	3,883
2027	4,022
2028 – 2032	21,002

The plan's target asset allocation for 2023 and the weighted-average asset allocation of plan assets as of June 30, 2022 and 2021 are:

	Target Allocation	Percentage of Plan Assets	
For the Year Ended June 30	2023	2022	2021
Debt securities	65% - 85%	77%	71%
Equity securities	10% - 30%	17%	21%
Global asset allocation/risk parity(1)	0% - 15%	5%	7%
Other	0% - 10%	1%	1%

(1) The global asset allocation/risk parity category consists of a variety of asset classes including, but not limited to, global bonds, global equities, real estate and commodities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The expected long-term rate of return for the plan's total assets is generally based on the plan's asset mix. In determining the rate to use, we consider the expected long-term real returns on asset categories, expectations for inflation, estimates of the effect of active management and actual historical returns.

The investment policy and strategy is to earn a long-term investment return sufficient to meet the obligations of the plan, while assuming a moderate amount of risk in order to maximize investment return. In order to achieve this goal, assets are invested in a diversified portfolio consisting of debt securities, equity securities and other investments in a manner consistent with ERISA's fiduciary requirements.

The fair values of the plan assets by asset category were:

	Fair Value Measurements Using			
As of June 30, 2022	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash and cash equivalents	$ 362	$ —	$ —	$ 362
Common-collective funds				
Global large cap equities	—	8,783	1,952	10,735
Fixed income securities	665	46,491	—	47,156
Mutual funds				
Global asset allocations/risk parity	3,023	—	—	3,023
Other				
Other	—	—	10	10
	$ 4,050	$ 55,274	$ 1,962	$ 61,286

	Fair Value Measurements Using			
As of June 30, 2021	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash and cash equivalents	$ 386	$ —	$ —	$ 386
Common-collective funds				
Global large cap equities	—	13,201	3,816	17,017
Fixed income securities	—	56,414	—	56,414
Global asset allocations/risk parity	—	2,016	—	2,016
Mutual funds				
Global asset allocations/risk parity	3,206	—	—	3,206
Other				
Other	—	—	60	60
	$ 3,592	$ 71,631	$ 3,876	$ 79,099

The table below provides a summary of the changes in the fair value of Level 3 assets:

Change in Fair Value Level 3 assets	**2022**	**2021**
Balance at beginning of period	$ 3,876	$ 5,732
Redemptions	(1,199)	(3,236)
Purchases	—	300
Change in fair value	(715)	1,080
Balance at end of period	$ 1,962	$ 3,876

The following outlines the valuation methodologies used to estimate the fair value of plan assets:

- Cash and cash equivalents are valued at $1 per unit;
- Common-collective funds are determined based on current market values of the underlying assets of the fund;
- Mutual funds and foreign currency deposits are valued using quoted market prices in active markets; and

- For Level 3 managed assets, business appraisers use a combination of valuations and appraisal methodologies, as well as a number of assumptions to create a price that brokers evaluate. For Level 3 non-managed assets, pricing is provided by various sources, such as issuer or investment manager.

Other employee benefit plans

We provide a 401(k) retirement savings plan, under which United States employees may make pre-tax and post-tax contributions. The Company contributes: (i) a matching contribution equal to 100% of the first 6.0% of an employee's contribution; and, (ii) an additional discretionary contribution of up to 4.5% of compensation, depending on the employee's age and years of service, provided that such contributions comply with ERISA non-discrimination requirements. Employee and Company contributions are subject to certain ERISA limitations. Employees are immediately vested in Company contributions. Our contribution expense was $6,341, $5,803, and $5,566, in 2022, 2021 and 2020, respectively.

Our consolidated balance sheets include other employee-related liabilities of $12,088 and $13,827 as of June 30, 2022 and 2021, respectively, including international retirement plans, supplemental retirement benefits and long-term incentive arrangements. Expense under these plans was $3,788, $5,095, and $5,725 in 2022, 2021 and 2020, respectively.

12. Income Taxes

The components of income before income taxes consisted of the following:

For the Year Ended June 30	2022	2021	2020
Domestic	$ 27,695	$ 12,684	$ (3,142)
Foreign	44,632	53,784	58,654
Income before income taxes	$ 72,327	$ 66,468	$ 55,512

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Components of the provision for income taxes were:

For the Year Ended June 30	2022	2021	2020
Current provision (benefit):			
Federal	$ 4,874	$ 99	$ (1,271)
State and local	1,468	887	401
Foreign	17,613	13,280	14,705
Total current provision	23,955	14,266	13,835
Deferred provision (benefit):			
Federal	(75)	291	5,226
State and local	251	(110)	696
Foreign	23	(2,663)	218
Change in valuation allowance–foreign	(1,002)	299	1,985
Total deferred provision (benefit)	(803)	(2,183)	8,125
Provision for income taxes	$ 23,152	$ 12,083	$ 21,960

Reconciliations of the federal statutory rate to the Company's effective tax rate were:

For the Year Ended June 30	2022	2021	2020
Federal income tax rate	21.0 %	21.0 %	21.0 %
State and local taxes, net of federal benefit	2.0	0.8	1.7
Foreign income tax rates	4.9	4.2	3.6
Changes in uncertain tax positions	4.4	(6.8)	5.2
Global Intangible Low-Taxed Income	0.3	1.3	6.2
Recognition of federal and foreign tax credits	(0.9)	(2.1)	(0.9)
Change in valuation allowance	(1.4)	0.5	3.6
Foreign derived intangible income	(2.1)	—	—
Other	3.8	(0.7)	(0.8)
Effective tax rate	32.0 %	18.2 %	39.6 %

We record the Global Intangible Low-Taxed Income (GILTI) aspects of comprehensive U.S. income tax legislation as a period expense.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The tax effects of significant temporary differences that comprise deferred tax assets and liabilities were:

As of June 30	2022	2021
Deferred tax assets:		
Employee-related accruals	$ 6,879	$ 6,337
Inventory	2,288	2,094
Environmental remediation	751	765
Net operating loss carry forwards–domestic	1,323	1,522
Net operating loss carry forwards–foreign	4,348	5,517
Operating lease liabilities	7,639	8,312
Other	(1,066)	4,672
	22,162	29,219
Valuation allowance	(2,618)	(3,709)
	19,544	25,510
Deferred tax liabilities:		
Property, plant and equipment and intangible assets	(7,187)	(7,550)
Operating lease ROU assets	(7,489)	(8,251)
Other	(24)	(793)
	(14,700)	(16,594)
Net deferred tax asset	$ 4,844	$ 8,916

Deferred taxes are included in the consolidated balance sheets as follows:

As of June 30	2022	2021
Other assets	$ 5,849	$ 9,861
Other liabilities	(1,005)	(945)
	$ 4,844	$ 8,916

The valuation allowance established against deferred tax assets was:

As of June 30	2022	2021	2020
Balance at beginning of period	$ 3,709	$ 3,403	$ 808
(Benefit) provision for income taxes	(1,091)	306	2,595
Balance at end of period	$ 2,618	$ 3,709	$ 3,403

The Company records valuation allowances against certain foreign and state deferred tax assets when, after considering all of the available evidence, it is more likely than not that these assets will not be realized.

The Company has $26,526 of state net operating loss carry forwards. $14,308 that will expire in 2023 through 2042, and $12,218 that do not expire, and $17,844 of foreign net operating loss carry forwards of which most are in jurisdictions that have no expiration.

If amounts are repatriated from certain of our foreign subsidiaries, we could be subject to additional non-U.S. income and withholding taxes. We consider undistributed earnings of such foreign subsidiaries to be indefinitely reinvested. At June 30, 2022, our cash and cash equivalents and short-term investments included $88,463 held by our international subsidiaries. We do not provide income taxes for foreign currency translation adjustments relating to investments in international subsidiaries that will be held indefinitely.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As tax law is complex and often subject to varied interpretations, it is uncertain whether some of our tax positions will be sustained upon examination. Tax liabilities associated with uncertain tax positions represent unrecognized tax benefits, which arise when the estimated benefit recorded in our financial statements differs from the amounts taken or expected to be taken in a tax return because of the uncertainties described above. Substantially all of these unrecognized tax benefits, if recognized, would reduce our effective income tax rate.

Reconciliations of the beginning and ending amounts of gross unrecognized tax benefits are as follows:

As of June 30	2022	2021	2020
Unrecognized tax benefits–beginning of period	$ 5,311	$ 9,507	$ 6,343
Tax position changes–current period	5,333	1,873	2,850
Tax position changes–prior periods, including settlements with tax authorities	(1,175)	(5,354)	108
Lapse of statute of limitations	(1,071)	(1,109)	—
Effect of changes in exchange rates	(566)	394	206
Unrecognized tax benefits–end of period	7,832	5,311	9,507
Interest and penalties–end of period	427	391	969
Total liabilities related to uncertain tax positions	$ 8,259	$ 5,702	$ 10,476

We recognize interest and penalties associated with uncertain tax positions as a component of the provision for income taxes. We recognized and recorded interest and penalties expense of $74, $69, and $214 for 2022, 2021 and 2020, respectively.

Income tax returns for the following periods are no longer subject to examination by the relevant tax authorities:

- U.S. federal and significant states, through June 30, 2019;
- Brazil, through December 31, 2016;
- Israel, through June 30, 2017, for certain subsidiaries and through June 30, 2019, for certain subsidiaries.

13. Commitments and Contingencies

Environmental

Our operations and properties are subject to extensive federal, state, local and foreign laws and regulations, including those governing pollution; protection of the environment; the use, management, and release of hazardous materials, substances and wastes; air emissions; greenhouse gas emissions; water use, supply and discharges; the investigation and remediation of contamination; the manufacture, distribution, and sale of regulated materials, including pesticides; the importing, exporting and transportation of products; and the health and safety of our employees (collectively, "Environmental Laws"). As such, the nature of our current and former operations exposes us to the risk of claims with respect to such matters, including fines, penalties, and remediation obligations that may be imposed by regulatory authorities. Under certain circumstances, we might be required to curtail operations until a particular problem is remedied. Known costs and expenses under Environmental Laws incidental to ongoing operations, including the cost of litigation proceedings relating to environmental matters, are included within operating results. Potential costs and expenses may also be incurred in connection with the repair or upgrade of facilities to meet existing or new requirements under Environmental Laws or to investigate or remediate potential or actual contamination, and from time to time we establish reserves for such contemplated investigation and remediation costs. In many instances, the ultimate costs under Environmental Laws and the period during which such costs are likely to be incurred are difficult to predict.

While we believe that our operations are currently in material compliance with Environmental Laws, we have, from time to time, received notices of violation from governmental authorities, and have been involved in civil or criminal action for such violations. Additionally, at various sites, our subsidiaries are engaged in continuing investigation, remediation and/or monitoring efforts to address contamination associated with historic operations of the sites. We devote considerable resources to complying with Environmental Laws and managing environmental liabilities. We have

developed programs to identify requirements under, and maintain compliance with Environmental Laws; however, we cannot predict with certainty the effect of increased and more stringent regulation on our operations, future capital expenditure requirements, or the cost of compliance.

The nature of our current and former operations exposes us to the risk of claims with respect to environmental matters and we cannot assure we will not incur material costs and liabilities in connection with such claims. Based on our experience, we believe that the future cost of compliance with existing Environmental Laws, and liabilities for known environmental claims pursuant to such Environmental Laws, will not have a material adverse effect on our financial position, results of operations, cash flows or liquidity.

The United States Environmental Protection Agency (the "EPA") is investigating and planning for the remediation of offsite contaminated groundwater that has migrated from the Omega Chemical Corporation Superfund Site ("Omega Chemical Site"), which is upgradient of the Santa Fe Springs, California facility of our subsidiary, Phibro-Tech, Inc. ("Phibro-Tech"). The EPA has entered into a settlement agreement with a group of companies that sent chemicals to the Omega Chemical Site for processing and recycling ("OPOG") to remediate the contaminated groundwater that has migrated from the Omega Chemical Site in accordance with a general remedy selected by EPA. The EPA has named Phibro-Tech and certain other subsidiaries of PAHC as potentially responsible parties ("PRPs") due to groundwater contamination from Phibro-Tech's Santa Fe Springs facility that has allegedly commingled with contaminated groundwater from the Omega Chemical Site. In September 2012, the EPA notified approximately 140 PRPs, including Phibro-Tech and the other subsidiaries, that they have been identified as potentially responsible for remedial action for the groundwater plume affected by the Omega Chemical Site and for EPA oversight and response costs. Phibro-Tech contends that any groundwater contamination at its site is localized and due to historical operations that pre-date Phibro-Tech and/or contaminated groundwater that has migrated from upgradient properties. In addition, a successor to a prior owner of the Phibro-Tech site has asserted that PAHC and Phibro-Tech are obligated to provide indemnification for its potential liability and defense costs relating to the groundwater plume affected by the Omega Chemical Site. PAHC and Phibro-Tech have vigorously contested this position and have asserted that the successor to the prior owner is required to indemnify Phibro-Tech for its potential liability and defense costs. Furthermore, several members of OPOG filed a complaint under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and the Resource Conservation and Recovery Act in the United States District Court for the Central District of California against many of the PRPs allegedly associated with the groundwater plume affected by the Omega Chemical Site (including Phibro-Tech) for contribution toward past and future costs associated with the investigation and remediation of the groundwater plume affected by the Omega Chemical Site, and the United States Department of Justice, on behalf of the EPA, sent Phibro-Tech and certain other PRPs a pre-litigation notice letter in August 2022 regarding potential CERCLA Sec. 107 cost recovery claims seeking unrecovered past costs related to the groundwater plume affected by the Omega Chemical Site, along with a declaration allocating liability for future costs. Due to the ongoing nature of the EPA's investigation, the preliminary stage of the ongoing litigation and Phibro-Tech's dispute with the prior owner's successor, at this time we cannot predict with any degree of certainty what, if any, liability Phibro-Tech or the other subsidiaries may ultimately have for investigation, remediation and the EPA oversight and response costs associated with the affected groundwater plume.

Based upon information available, to the extent such costs can be estimated with reasonable certainty, we estimated the cost for further investigation and remediation of identified soil and groundwater problems at operating sites, closed sites and third-party sites, and closure costs for closed sites, to be approximately $4,287 and $4,293 at June 30, 2022 and 2021, respectively, which is included in current and long-term liabilities on the consolidated balance sheets. However, future events, such as new information, changes in existing Environmental Laws or their interpretation, and more vigorous enforcement policies of regulatory agencies, may give rise to additional expenditures or liabilities that could be material. For all purposes of the discussion under this caption and elsewhere in this report, it should be noted that we take and have taken the position that neither PAHC nor any of our subsidiaries are liable for environmental or other claims made against one or more of our other subsidiaries or for which any of such other subsidiaries may ultimately be responsible.

Claims and Litigation

PAHC and its subsidiaries are party to various claims and lawsuits arising out of the normal course of business including product liabilities, payment disputes and governmental regulation. Certain of these actions seek damages in various amounts. In many cases, such claims are covered by insurance. We believe that none of the claims or pending

lawsuits, either individually or in the aggregate, will have a material adverse effect on our financial position, results of operations, cash flows or liquidity.

Employment and Severance Agreements

We have entered into employment agreements with certain executive management and other employees that specify severance benefits of up to 15 months of the employee's compensation.

Purchase Commitments

As of June 30, 2022, we have agreements totaling $7.9 million to purchase goods and services that are enforceable and legally binding and include amounts for future inventory purchases. Payments for these obligations are expected to be approximately $3.8 million in 2023, $2.2 million in 2024, and $1.9 million thereafter.

14. Derivatives

We monitor our exposure to foreign currency exchange rates and interest rates and from time-to-time use derivatives to manage certain of these risks. We designate derivatives as a hedge of a forecasted transaction or of the variability of the cash flows to be received or paid in the future related to a recognized asset or liability (cash flow hedge). All changes in the fair value of a highly effective cash flow hedge are recorded in accumulated other comprehensive income (loss).

We routinely assess whether the derivatives used to hedge transactions are effective. If we determine a derivative cease to be an effective hedge, we discontinue hedge accounting in the period of the assessment for that derivative, and immediately recognize any unrealized gains or losses related to the fair value of that derivative in the consolidated statements of operations.

We record derivatives at fair value in the consolidated balance sheets. For additional details regarding fair value, see "Note 15— Fair Value Measurements."

In July 2017, we entered into an interest rate swap agreement on the first $150,000 of notional principal that effectively converted the floating LIBOR portion of our interest obligation on that amount of debt to a fixed interest rate of 1.8325%. The agreement matured in June 2022. In March 2020, we entered into an interest rate swap agreement on an additional $150,000 of notional principal that effectively converts the floating LIBOR portion of our interest obligation on that amount of debt to a fixed rate of 0.62%. The 2020 agreement increased the notional principal amount to $300,000 effective June 2022 through June 2025, and effectively converts the floating LIBOR portion of our interest obligation on $300,000 of debt to a fixed interest rate of 0.62%. The forecasted transactions are probable of occurring, and the interest rate swaps have been designated as highly effective cash flow hedges.

We entered into foreign currency option contracts to hedge cash flows related to monthly inventory purchases. The individual option contracts mature monthly through August 2023. The forecasted inventory purchases are probable of occurring and the individual option contracts were designated as highly effective cash flow hedges.

The consolidated balance sheet includes the net fair values of our outstanding foreign currency option contracts within the respective line items, based on the net financial position and maturity date of the individual contracts. The consolidated balance sheet includes the net fair values of our outstanding interest rate swaps within the respective balance sheet line items, based on the expected timing of the cash flows. The consolidated balance sheet includes assets and liabilities for the fair values of outstanding derivatives that are designated and effective as cash flow hedges as follows:

As of June 30	2022	2021
Other current assets		
Brazil Real options, net	$ 498	$ —
Interest rate swaps	7,417	—
Other assets		
Brazil Real options, net	104	355
Interest rate swaps	12,871	2,341

Accrued expense and other current liabilities		
Brazil Real options, net	—	(150)
Interest rate swaps	—	(3,336)
Total Fair Value		
Brazil Real options, net	602	205
Interest rate swaps	20,288	(995)

Notional amounts of the derivatives as of the balance sheet date were:

As of June 30		2022
Brazil Real call options	R$	76,000
Brazil Real put options	R$	(76,000)
Interest rate swaps	$	300,000

The consolidated statements of operations and statements of other comprehensive income ("OCI") for the years ended June 30, 2022 and 2021 included the effects of derivatives as follows:

For the Year Ended June 30	2022	2021
Brazil Real options, net		
Expense recorded in consolidated statement of operations	$ 1,124	$ 1,093
Consolidated statement of operations - total cost of goods sold	$ 656,861	$ 561,973
(Income) recorded in OCI	$ (398)	$ (3,979)
Interest rate swaps		
Expense recorded in consolidated statements of operations	$ 2,905	$ 3,317
Consolidated statement of operations - total interest expense, net	$ 11,875	$ 12,880
(Income) recorded in OCI	$ (21,283)	$ (8,679)

We recognize gains and losses related to foreign currency derivatives as a component of cost of goods sold at the time the hedged item is sold. Inventory as of June 30, 2022, included realized net losses of $1,000 related to matured contracts. We anticipate the net losses included in inventory will be recognized in cost of goods sold within the next twelve to eighteen months.

15. Fair Value Measurements

Fair value is defined as the exit price that would be received to sell an asset or paid to transfer a liability. Fair value is a market-based measurement that should be determined using assumptions that market participants would use in pricing an asset or liability. Financial assets and liabilities are measured at fair value using the three-level valuation hierarchy for disclosure of fair value measurements. The determination of the applicable level within the hierarchy of a particular asset or liability depends on the inputs used in the valuation as of the measurement date, notably the extent to which the inputs are market-based (observable) or internally derived (unobservable). Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from independent sources. Unobservable inputs are inputs based on a company's own assumptions about market participant assumptions developed based on the best information available in the circumstances. The hierarchy is broken down into three levels based on the reliability of inputs as follows:

Level 1 — Quoted prices in active markets for identical assets or liabilities.

Level 2 — Significant observable inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly through corroboration with observable market data.

Level 3 — Unobservable inputs for which there is little or no market data available, and that are significant to the overall fair value measurement, are employed that require the reporting entity to develop its own assumptions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In assessing the fair value of financial instruments at June 30, 2022 and 2021, we used a variety of methods and assumptions that were based on estimates of market conditions and risks existing at the time.

Short-term investments

Our short-term investments consist of cash deposits held at financial institutions. We consider the carrying amounts of these short-term investments to be representative of their fair value.

Current Assets and Liabilities

We consider the carrying amounts of current assets and current liabilities to be representative of their fair value because of the current nature of these items.

Contingent Consideration on Acquisitions

We determine the fair value of contingent consideration on acquisitions based on contractual terms, our current forecast of performance factors related to the acquired business and an applicable discount rate.

Debt

We record debt, including term loans and revolver balances, at amortized cost in our consolidated financial statements. We believe the carrying value of the debt is approximately equal to its fair value, due to the variable nature of the instruments and our evaluation of estimated market prices.

Derivatives

We determine the fair value of derivative instruments based upon pricing models using observable market inputs for these types of financial instruments, such as spot and forward currency translation rates.

Non-financial assets

Our non-financial assets, which primarily consist of goodwill, other intangible assets, property and equipment, and lease-related ROU assets, are not required to be measured at fair value on a recurring basis, and instead are reported at carrying value in the consolidated balance sheet. Assets and liabilities may be required to be measured at fair value on a non-recurring basis, either upon initial recognition or for subsequent accounting or reporting, including the initial recognition of net assets acquired in a business combination. These fair value measurements involve unobservable inputs that reflect estimates and assumptions that represent Level 3 inputs.

Fair Value of Assets (Liabilities)

As of	June 30, 2022			June 30, 2021		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Short-term investments	$ 17,000	$ —	$ —	$ 43,000	$ —	$ —
Foreign currency derivatives	$ —	$ 602	$ —	$ —	$ 205	$ —
Interest rate swaps	$ —	$ 20,288	$ —	$ —	$ (995)	$ —
Contingent consideration on acquisitions	$ —	$ —	$ —	$ —	$ —	$ (4,840)

There were no transfers between levels during the periods presented. There were no changes in the fair value of the Level 3 liabilities.

For a detailed discussion on the fair value of our pension plan assets, see "— Employee Benefit Plans."

The contingent consideration on acquisitions is the minimum amount payable in accordance with the acquisition agreement for Osprey. The contingent consideration of $4,840 was paid in October 2021.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

16. Business Segments

We evaluate performance and allocate resources based on the Animal Health, Mineral Nutrition and Performance Products segments. Certain of our costs and assets are not directly attributable to a segment or segments and we refer to these items as Corporate. We do not allocate Corporate costs or assets to the other segments because they are not used to evaluate the segments' operating results or financial position. Corporate costs include certain costs related to executive management, information technology, legal, finance, human resources and business development.

We evaluate performance of our segments based on Adjusted EBITDA. We define Adjusted EBITDA as income before income taxes plus (a) interest expense, net, (b) depreciation and amortization, (c) (income) loss from, and disposal of, discontinued operations, (d) other expense or less other income, as separately reported on our consolidated statements of operations, including foreign currency gains and losses and (e) certain items that we consider to be unusual, non-operational or non-recurring.

The accounting policies of our segments are the same as those described in the summary of significant accounting policies included herein.

For the Year Ended June 30	2022	2021	2020
Net sales			
Animal Health	$ 607,055	$ 545,716	$ 526,904
Mineral Nutrition	259,512	220,560	214,412
Performance Products	75,694	67,074	59,038
Total segments	$ 942,261	$ 833,350	$ 800,354
Depreciation and amortization			
Animal Health	$ 26,759	$ 25,839	$ 26,287
Mineral Nutrition	2,616	2,690	2,522
Performance Products	1,717	1,702	1,860
Total segments	$ 31,092	$ 30,231	$ 30,669
Adjusted EBITDA			
Animal Health	$ 124,106	$ 123,953	$ 123,106
Mineral Nutrition	24,038	17,116	14,678
Performance Products	8,706	9,437	4,534
Total segments	$ 156,850	$ 150,506	$ 142,318
Reconciliation of income before income taxes to Adjusted EBITDA			
Income before income taxes	$ 72,327	$ 66,468	$ 55,512
Interest expense, net	11,875	12,880	12,856
Depreciation and amortization – Total segments	31,092	30,231	30,669
Depreciation and amortization – Corporate	1,613	1,654	1,672
Corporate costs	45,767	42,624	40,178
Gain on sale of investment	(1,203)	—	—
Acquisition-related cost of goods sold	316	—	280
Acquisition-related transaction costs	279	—	462
Acquisition-related other	—	—	(2,821)
Restructuring costs	—	—	425
Stock-based compensation	—	1,129	2,259
Foreign currency (gains) losses, net	(5,216)	(4,480)	826
Adjusted EBITDA – Total segments	$ 156,850	$ 150,506	$ 142,318

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of June 30	2022	2021
Identifiable assets		
Animal Health	$ 654,862	$ 595,315
Mineral Nutrition	87,379	67,338
Performance Products	39,490	36,847
Total segments	781,731	699,500
Corporate	149,968	141,825
Total	$ 931,699	$ 841,325

The Animal Health segment includes all goodwill of the Company. Corporate assets include cash and cash equivalents, short-term investments, debt issuance costs, income tax related assets and certain other assets.

The geographic location of property, plant and equipment, net was:

As of June 30	2022	2021
Property, plant and equipment, net		
United States	$ 57,605	$ 57,892
Israel	63,971	58,648
Brazil	22,981	16,114
Ireland	15,596	17,315
Other	5,337	4,737
	$ 165,490	$ 154,706

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in our periodic reports that we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act") are recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 13a-15(f), we carried out an evaluation, under the supervision and with the participation of our management, including our CEO and CFO, of the effectiveness of our disclosure controls and procedures as of June 30, 2022. Based on this evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of June 30, 2022 to provide the reasonable assurance described above.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including the CEO and the CFO, we carried out an evaluation of the effectiveness of our internal control over financial reporting as of June 30, 2022 using the criteria established in "Internal Control-Integrated Framework" (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, management concluded that our internal control over financial reporting was effective as of June 30, 2022.

The effectiveness of our internal control over financial reporting as of June 30, 2022, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included under "Item 8 - Financial Statements."

Changes in Internal Control Over Financial Reporting

There have been no changes to our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference to our 2022 Proxy Statement to be filed with the SEC within 120 days of the year ended June 30, 2022.

Our Board of Directors has adopted a Code of Business Conduct and Ethics applicable to all officers, directors and employees, which is available on our website (investors.pahc.com) under “Corporate Governance.”

Item 11. Executive Compensation

The information required by this item is incorporated by reference to our 2022 Proxy Statement to be filed with the SEC within 120 days of the year ended June 30, 2022.

Item 12. Security Ownership of Certain Beneficial Owners and Management Related Stockholder Matters

The information required by this item is incorporated by reference to our 2022 Proxy Statement to be filed with the SEC within 120 days of the year ended June 30, 2022.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to our 2022 Proxy Statement to be filed with the SEC within 120 days of the year ended June 30, 2022.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference to our 2022 Proxy Statement to be filed with the SEC within 120 days of the year ended June 30, 2022.

PART IV

Item 15. Exhibits, Financial Statement Schedules

We have filed the following documents as part of this Form 10-K:

(1) Consolidated Financial Statements:

Report of Independent Registered Public Accounting Firm

Consolidated Statements of Operations for the fiscal years ended June 30, 2022, 2021 and 2020

Consolidated Statements of Comprehensive Income for the fiscal years ended June 30, 2022, 2021 and 2020

Consolidated Balance Sheets at June 30, 2022 and 2021

Consolidated Statements of Cash Flows for the fiscal years ended June 30, 2022, 2021 and 2020

Consolidated Statements of Changes in Stockholders' Equity for the fiscal years ended June 30, 2022, 2021 and 2020

Notes to Consolidated Financial Statements

(2) Schedules: None

(3) The exhibits filed are listed in the Index to Exhibits immediately preceding the signature page of this Annual Report on Form 10-K.

EXHIBIT INDEX

Exhibit 3.1	Amended and Restated Certificate of Incorporation of Phibro Animal Health Corporation (incorporated by reference to Exhibit 3.1 to Phibro Animal Health Corporation's Quarterly Report on Form 10-Q filed on May 13, 2014 (File No. 001-36410)).
Exhibit 3.2	Amended and Restated Bylaws of Phibro Animal Health Corporation (incorporated by reference to Exhibit 3.2 of Phibro Animal Health Corporation's Quarterly Report on Form 10-Q filed on May 13, 2014 (File No. 001-36410)).
Exhibit 4.1	Registration Rights Agreement between Phibro Animal Health Corporation and BFI Co., LLC, dated as of April 16, 2014 (incorporated by reference to Exhibit 4.9 of Phibro Animal Health Corporation's registration statement on Form S-1/A filed on March 31, 2014 (File No. 333-194467)).
Exhibit 4.2	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to Exhibit 4.2 of the Phibro Animal Health Corporation's 2019 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on August 27, 2019 (File No. 001-36410)).
Exhibit 10.1	Amended and Restated Credit Agreement dated April 22, 2021, among Phibro Animal Health Corporation, Bank of America, N.A., and each lender from time-to-time party thereto (incorporated by reference to Exhibit 10.1 to Phibro Animal Health Corporation's Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 22, 2021 (File No. 001-36410))
Exhibit 10.2	Unprotected Lease Agreement, dated January 26, 2011, by and between Samaria Carpets Ltd. and ABIC Biological Laboratories Ltd. (translated from Hebrew) (incorporated by reference to Exhibit 10.17 of Phibro Animal Health Corporation's registration statement on Form S-1 filed on March 10, 2014 (File No. 333-194467)).
Exhibit 10.3	Employment Agreement, dated March 27, 2014, by and between Jack C. Bendheim and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.18 of Phibro Animal Health Corporation's registration statement on Form S-1/A filed on March 31, 2014 (File No. 333-194467)).
Exhibit 10.4	Employment Offer Letter, dated May 2, 2008, by and between Larry L. Miller and Phibro Animal Health Corporation, including confidentiality and nondisclosure, employee invention, and noncompetition and nonsolicitation agreements dated as of May 2, 2008 (incorporated by reference to Exhibit 10.20 of Phibro Animal Health Corporation's registration statement on Form S-1 filed on March 10, 2014 (File No. 333-194467)).
Exhibit 10.5	Clarifying Amendment to Employment Offer Letter, dated December 21, 2009, by and between Larry L. Miller and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.21 of Phibro Animal Health Corporation's registration statement on Form S-1 filed on March 10, 2014 (File No. 333-194467)).
Exhibit 10.6	Amendment to Employment Offer Letter, dated December 15, 2011, by and between Larry L. Miller and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.22 of Phibro Animal Health Corporation's registration statement on Form S-1 filed on March 10, 2014 (File No. 333-194467)).
Exhibit 10.7	Phibro Animal Health Corporation 2008 Incentive Plan (incorporated by reference to Exhibit 10.23 of Phibro Animal Health Corporation's registration statement on Form S-1 filed on March 10, 2014 (File No. 333-194467)).

Exhibit 10.8	Phibro Animal Health Corporation Management Incentive Plan (incorporated by reference to Exhibit 10.24 of Phibro Animal Health Corporation's registration statement on Form S-1/A filed on March 31, 2014 (File No. 333-194467)).
Exhibit 10.9	Phibro Animal Health Corporation Retirement Income and Deferred Compensation Plan, as amended and restated as of April 15, 2009 (incorporated by reference to Exhibit 10.25 of Phibro Animal Health Corporation's registration statement on Form S-1 filed on March 10, 2014 (File No. 333-194467)).
Exhibit 10.10	Phibro Animal Health Corporation Executive Income Deferred Compensation Agreement, dated as of March 1, 1990 (incorporated by reference to Exhibit 10.26 of Phibro Animal Health Corporation's registration statement on Form S-1 filed on March 10, 2014 (File No. 333-194467)).
Exhibit 10.11	Form of 2009 Stock Option Grant Agreement (incorporated by reference to Exhibit 10.28 of Phibro Animal Health Corporation's registration statement on Form S-1/A filed on March 31, 2014 (File No. 333-194467)).
Exhibit 10.12	Form of 2013 Stock Option Grant Agreement (incorporated by reference to Exhibit 10.29 of Phibro Animal Health Corporation's registration statement on Form S-1/A filed on March 31, 2014 (File No. 333-194467)).
Exhibit 10.13	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.32 of Phibro Animal Health Corporation's registration statement on Form S-1/A filed on April 4, 2014 (File No. 333-194467)).
Exhibit 10.14*	Intellectual Property Purchase Agreement dated January 20, 2015 by and between MJ Biologics, Inc. and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.33 to Phibro Animal Health Corporation's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 11, 2015).
Exhibit 10.15*	First Amendment, dated July 31, 2018 to the Intellectual Property Purchase Agreement, drafted as of January 20, 2015, by and among MJ Biologics, Inc. and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.18 to Phibro Animal Health Corporation's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 6, 2018 (File No. 001-36410)).
Exhibit 10.16	Form of Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.2 to Phibro Animal Health Corporation's Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 7, 2018 (File No. 13-1840497)).
Exhibit 10.17	Executive Long-Term Incentive Agreement dated May 11, 2015, by and between Phibro Animal Health Corporation and Richard G. Johnson (incorporated by reference to Exhibit 10.34 to Phibro Animal Health Corporation's 2015 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on September 10, 2015 (File No. 001-36410)).
Exhibit 10.18	Employment Agreement, dated November 3, 2006, by and between Thomas G. Dagger and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.20 of the Phibro Animal Health Corporation's 2019 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on August 27, 2019 (File No. 001-36410)).
Exhibit 10.19	Amendment to Employment Agreement, dated November 16, 2009, by and between Thomas G. Dagger and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.21 of the Phibro Animal Health Corporation's 2019 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on August 27, 2019 (File No. 001-36410)).

Exhibit 10.20	Amendment to Employment Agreement, dated December 16, 2011, by and between Thomas G. Dagger and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.22 of the Phibro Animal Health Corporation's 2019 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on August 27, 2019 (File No. 001-36410)).
Exhibit 10.21	Employment Offer Letter, dated September 14, 2020, by and between Damian L. Finio and Phibro Animal Health Corporation, including confidentiality and nondisclosure, employee invention, and noncompetition and nonsolicitation agreements (incorporated by reference to Exhibit 10.1 to Phibro Animal Health Corporation's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 4, 2020 (File No. 001-36410)).
Exhibit 10.22	Continuing Employment Letter, dated November 2, 2020, by and between Richard G. Johnson and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.2 to Phibro Animal Health Corporation's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 4, 2020 (File No. 001-36410)).
Exhibit 10.23	General Release and Separation Agreement, dated November 16, 2020, by and between Richard G. Johnson and Phibro Animal Health Corporation. (incorporated by reference to Exhibit 10.24 to Phibro Animal Health Corporation's 2021 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on August 25, 2021 (File No. 001-36410))
Exhibit 10.24	Severance Protection Letter, dated February 7, 2022, by and between Damian Finio and Phibro Animal Health Corporation (incorporated by reference to Exhibit 10.25 to Phibro Animal Health Corporation's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on February 9, 2022 (File No. 001-36410))
Exhibit 21.1	List of Subsidiaries of Phibro Animal Health Corporation.
Exhibit 23.1	Consent of Independent Registered Public Accounting Firm.
Exhibit 31.1	Chief Executive Officer-Certification pursuant to Sarbanes-Oxley Act of 2002 Section 302.
Exhibit 31.2	Chief Financial Officer-Certification pursuant to Sarbanes-Oxley Act of 2002 Section 302.
Exhibit 32.1**	Chief Executive Officer-Certification pursuant to Sarbanes-Oxley Act of 2002 Section 906.
Exhibit 32.2**	Chief Financial Officer-Certification pursuant to Sarbanes-Oxley Act of 2002 Section 906.
Exhibit 101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
Exhibit 101.SCH	Inline XBRL Taxonomy Extension Schema Document.
Exhibit 101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
Exhibit 101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
Exhibit 101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
Exhibit 101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
Exhibit 104	Cover Page Interactive Data File (embedded within the inline XBRL and contained in Exhibit 101)

* Confidential treatment of certain provisions of this exhibit has been requested with the Securities and Exchange Commission. Omitted material for which confidential treatment has been requested has been filed separately with the Securities and Exchange Commission.

** This certification is deemed not filed for purposes of section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act.

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned thereunto duly authorized.

Phibro Animal Health Corporation

August 24, 2022 By: /s/ Jack C. Bendheim
Jack C. Bendheim
Chairman, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Phibro Animal Health Corporation

August 24, 2022 By: /s/ Jack C. Bendheim
Jack C. Bendheim
Chairman, President and Chief Executive Officer

August 24, 2022 By: /s/ Damian Finio
Damian Finio
Chief Financial Officer

August 24, 2022 By: /s/ Daniel M. Bendheim
Daniel M. Bendheim
Director and Executive Vice President,
Corporate Strategy

August 24, 2022 By: /s/ Jonathan Bendheim
Jonathan Bendheim
Director and President, MACIE Region and
General Manager of Israel Operations

August 24, 2022 By: /s/ Gerald K. Carlson
Gerald K. Carlson
Director

August 24, 2022 By: /s/ E. Thomas Corcoran
E. Thomas Corcoran
Director

August 24, 2022 By: /s/ Sam Gejdenson
Sam Gejdenson
Director

August 24, 2022 By: /s/ Mary Lou Malanoski
Mary Lou Malanoski
Director

August 24, 2022 By: /s/ Carol A. Wrenn
Carol A. Wrenn
Director

EXHIBIT 21.1

PHIBRO ANIMAL HEALTH CORPORATION LIST OF SUBSIDIARIES

SUBSIDIARY	JURISDICTION
8861 Dice Road LLC	California
First Dice Road Company, A California Limited Partnership	California
Western Magnesium Corp.	California
Phibro Animal Health Holdings, Inc.	Delaware
Prince Agri Products, Inc.	Delaware
Phibro-Tech, Inc.	Delaware
PhibroWood, LLC	Delaware
PMC Quincy, Inc.	Delaware
C P Chemicals, Inc.	New Jersey
Phibrochem, Inc.	New Jersey
OmniGen Research, LLC	Oregon
Phibro Animal Health de Argentina SRL	Argentina
Phibro Animal Health PTY Limited	Australia
Phibro Animal Health S.A.	Belgium
Phibro Saude Animal Internacional Ltda.	Brazil
Phibro Saude e Nutricao Animal Ltda.(1)	Brazil
Quimica Real Ltda.	Brazil
Phibro Animal Health Ltd.	Canada
Phibro Animal Health Holdings, Inc. Chile Limitada	Chile
Phibro Animal Health (Shanghai) Co., Ltd.	China
Phibro Animal Health Colombia S.A.S.	Colombia
Phibro Animal Health de Republica Dominicana, SRL	Dominican Republic
Phibro Animal Health (Egypt) LLC	Egypt
Phibro Animal Health For Trading (Egypt) S.A.E.	Egypt
Phibro Corporation Limited	Hong Kong
Phibro Parent Service Limited	Hong Kong
Phibro Animal Health Limited	Ireland
Abic Biological Laboratories Ltd.	Israel
Abic Veterinary Products Ltd.	Israel
Phibro Animal Health Ltd.(2)	Israel
Phibro Animal Nutrition Ltd.(3)	Israel
pHi-Tech Animal Health Technologies Ltd.(4)	Israel
Phibro Corporation (M) Sdn. Bhd.	Malaysia
PB Animal Health de Mexico S. de R.L. de C.V.	Mexico
PBAH Peruana S.A.C.	Peru
Phibro Animal Health (Philippines), Inc.	Philippines
Phibro Animal Health (Poland) sp. z.o.o.	Poland
Phibro Animal Health (Proprietary) Limited	South Africa
Phibro Animal Health (Thailand) Limited	Thailand
Phibro Hayvan Sagligi Urunleri Sanayi ve Ticaret A.S	Turkey
Ferro Metal and Chemical Corporation Ltd.	United Kingdom
Phibro Animal Health SRL	Uruguay
Phibro Animal Health de Venezuela, C.A.	Venezuela
California Water Technologies LLC(5)	Michigan
North Field Extension, LLC(5)	New Jersey
Marion Bio-Tech, LLC(5)	Delaware
Hannibal Bio-Tech, LLC(5)	Delaware

(1) Formerly known as Planalquimica Industrial Ltda.

(2) Formerly known as Koffolk (1949) Ltd.

(3) Formerly known as Agrozan Ltd.

(4) Formerly known as Target Point-Technologies Ltd.

(5) We directly or indirectly own 50% of the entity.

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-198809) of Phibro Animal Health Corporation of our report dated August 24, 2022 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Florham Park, New Jersey
August 24, 2022

EXHIBIT 31.1

CERTIFICATIONS

I, Jack C. Bendheim, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended June 30, 2022, of Phibro Animal Health Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 24, 2022

/s/ Jack C. Bendheim

Jack C. Bendheim

Chairman, President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATIONS

I, Damian Finio, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended June 30, 2022, of Phibro Animal Health Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 24, 2022

/s/ Damian Finio

Damian Finio

Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned certifies that this periodic report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in this periodic report fairly presents, in all material respects, the financial condition and results of operations of the issuer.

Dated: August 24, 2022

/s/ Jack C. Bendheim

Jack C. Bendheim

Chairman, President and Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned certifies that this periodic report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in this periodic report fairly presents, in all material respects, the financial condition and results of operations of the issuer.

Dated: August 24, 2022

/s/ Damian Finio

Damian Finio
Chief Financial Officer