

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

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For The Year Ended December 31, 2021

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 001-13795

AMERICAN VANGUARD CORPORATION

Delaware
(State or other jurisdiction of
Incorporation or organization)

4695 MacArthur Court, Newport Beach, California
(Address of principal executive offices)

95-2588080
(I.R.S. Employer
Identification Number)

92660
(Zip Code)

(949) 260-1200

(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
Common Stock, \$.10 par value	AVD	New York Stock Exchange

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 whether 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, 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

Non-accelerated filer

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 financial 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.

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 voting stock of the registrant held by non-affiliates is \$523.8 million. This figure is estimated as of June 30, 2021 at which date the closing price of the registrant's Common Stock on the New York Stock Exchange was \$17.51 per share. For purposes of this calculation, shares owned by executive officers, directors, and 5% stockholders known to the registrant have been deemed to be owned by affiliates. The number of shares of \$.10 par value Common Stock outstanding as of June 30, 2021, was 31,200,611. The number of shares of \$.10 par value Common Stock outstanding as of March 1, 2022 was 30,944,838.

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

**ANNUAL REPORT ON FORM 10-K
December 31, 2021**

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**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES
(Dollars in thousands, except per share data)**

PART I

Unless otherwise indicated or the context otherwise requires, the terms “Company,” “we,” “us,” and “our” refer to American Vanguard Corporation and its consolidated subsidiaries (“AVD”).

Forward-looking statements in this report, including without limitation, statements relating to the Company’s plans, strategies, objectives, expectations, intentions, and adequacy of resources, are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that such forward-looking statements involve risks and uncertainties. (Refer to Part I, Item 1A, Risk Factors and Part II, Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operation, included in this Annual Report.)

All dollar amounts reflected in the consolidated financial statements are expressed in thousands, except per share data.

ITEM 1 BUSINESS

American Vanguard Corporation (“AVD”) was incorporated under the laws of the State of Delaware in January 1969 and operates as a holding company. Unless the context otherwise requires, references to the “Company” or the “Registrant,” in this Annual Report refer to AVD. The Company conducts its business through its principle operating subsidiaries, including AMVAC Chemical Corporation (“AMVAC”) for its domestic business and AMVAC Netherlands BV (“AMVAC BV”) for its international business.

The subsidiaries in the U.S. include: AMVAC, GemChem, Inc. (“GemChem”), Envance Technologies, LLC (“Envance”), TyraTech Inc. (“TyraTech”) and OHP Inc. (“OHP”).

Internationally, the Company operates its business through the following subsidiaries: AMVAC BV, AMVAC Hong Kong Limited (“AMVAC Hong Kong”), AMVAC Mexico Sociedad de Responsabilidad Limitada (“AMVAC M”), AMVAC de Costa Rica Sociedad de Responsabilidad Limitada (“AMVAC CR Srl”), AMVAC Singapore Pte, Ltd (“AMVAC Sgpr”), Grupo AgriCenter (including the parent AgriCenter S.A. and its subsidiaries) (“AgriCenter”), AMVAC do Brasil Representações Ltda (“AMVAC do Brasil”), AMVAC do Brazil 3p LTDA (“AMVAC 3p”), American Vanguard Australia PTY Ltd (“AVD Australia”), AgNova Technologies PTY Ltd (“AgNova”), and the Agrinos group (“Agrinos”).

Based on similar economic and operational characteristics, the Company’s business is aggregated into one reportable segment. Refer to Part II, Item 7 for selective enterprise information.

AMVAC is a California corporation that traces its history from 1945 and is a manufacturer of chemical, biological and biorational products that develops and markets solutions for agricultural, commercial and consumer uses. It synthesizes and formulates chemicals and ferments and extracts microbial products for crops, turf and ornamental plants, and human and animal health protection. These products, which include insecticides, fungicides, herbicides, soil health, plant nutrition, molluscicides, growth regulators, and soil fumigants, are marketed in liquid, powder, and granular forms. AMVAC primarily synthesizes, formulates, and distributes its own proprietary products or custom manufactures, formulates or distributes for others. In addition, the Company has carved out a leadership position in closed delivery systems, currently offers certain of its products in SmartBox, Lock ‘n Load and EZ Load systems, and is commercializing a precision application technology known as SIMPAS (see “*Intellectual Property*” below) which permits the delivery of multiple products (from AMVAC and/or other companies) at variable rates in a single pass. AMVAC has historically expanded its business through both the acquisition of established chemistries, the development and commercialization of new formulations or compounds through licensing arrangements, self-funded research and development of precision application technology and the expansion of its global distribution network to gain broader market access.

AMVAC BV is a Netherlands Corporation that was established in 2012 and is based in Utrecht, near Amsterdam in the Netherlands. AMVAC BV sells product both directly and through its network of subsidiaries in various international territories.

Below is a description of the Company’s acquisition/licensing activity over the past three years.

On July 1, 2021, the Company completed the purchase of certain assets from Syngenta Crop Protection related to the herbicide trifloxysulfuron (Envoke), including end-use registrations, data compensation claims, trademarks, formulation know-how, and books and records.

On October 8, 2020, the Company's Australian subsidiary, AVD Australia, completed the purchase of all the outstanding shares of AgNova, an Australian company that sources, develops, and distributes specialty crop protection and production solutions for agricultural and horticultural producers and for selected non-crop users. AgNova has an established reputation for cost-effective product development from original concept through evaluation, registration, marketing, and sales, with new technologies flowing from its development pipeline. AgNova is committed to the provision of innovative, value-adding solutions for agriculture and related industries. The acquired assets included product registration, trade names and trademarks, customer lists, workforce, fixed assets, and existing working capital.

On October 2, 2020, the Company's principal operating subsidiary, AMVAC, completed the purchase of all the outstanding shares of the Agrinos Group Companies (Agrinos) from Agrinos AS, a Norwegian holding company, from a liquidation proceeding of that entity before a Norwegian bankruptcy court in Oslo, Norway. In addition to the shares of Agrinos, AMVAC acquired a bank of microbial and micronutrients, as well as about 150 pending or issued patents. Agrinos is a fully integrated biological input supplier with proprietary technology, manufacturing facilities, and global distribution capabilities. Its High Yield Technology® product platform works in conjunction with other nutritional crop inputs to increase crop yield, improve soil health and reduce the environmental footprint of traditional agricultural practices. The acquired assets included product registration, trade names and trademarks, customer lists, workforce, fixed assets, two factories and existing working capital.

On April 1, 2020, the Company's principal operating subsidiary, AMVAC, acquired 6,250,000 common shares of Clean Seed Capital Group Ltd. (Clean Seed), representing an ownership of approximately 8%. In addition, AMVAC licensed from Clean Seed certain intellectual property rights related to Clean Seed's SMART planting technologies.

On December 20, 2019, the Company's principal operating subsidiary, AMVAC, completed the purchase of certain assets related to four herbicide products from E.I. du Pont de Nemours and Company for use in the U.S.. The purchased assets included end-use registrations, registration data, trademarks (specifically, Classic®, First Rate®, Python® and Hornet®), on-hand inventory, commercial sales information, know-how and certain product supply arrangements.

On July 1, 2019, the Company completed the acquisition of three crop protection products for the U.S. market from Raymat Crop Science, Inc. and its affiliate, Esstar Crop Science, Inc. The acquired products are the miticide etoxazole (Stifle), the insect growth regulator diflubenzuron (Cavalier), and a rice herbicide bispyribac sodium (Arroz). The acquired assets included product registrations, trademarks and trade names, customer lists and associated on-hand inventory.

On January 10, 2019, the Company's international subsidiary AMVAC do Brazil completed the purchase of the shares of Agrovant and Defensive, two distribution companies based in Brazil. Agrovant and Defensive market and distribute crop protection products and micronutrients with focus on the fruit and vegetable market segments throughout Brazil. The acquired entities held assets that consist of product registrations, trade names and trademarks, customer lists, workforce, fixed assets, and existing working capital. Agrovant and Defensive were merged in 2020 and renamed to AMVAC 3p.

Seasonality

The agricultural chemical industry, in general, is cyclical in nature. The demand for AVD's products tends to be seasonal. Seasonal usage, however, does not necessarily follow calendar dates, but more closely follows growing patterns, weather conditions, geography, weather related pressure from pests and customer marketing programs. Further, growing seasons vary by geographical region; thus, there is no single seasonal cycle affecting our sales. Rather, multiple seasons transpire over the course of the calendar year.

Backlog

AVD primarily sells its products based on purchase orders. The purchase orders are typically fulfilled within a short time frame. As a result, backlog is not considered a significant factor of, or a valid metric for, AVD's business. The 2021 year, however, did end with a significantly larger than normal backlog of orders that is expected to result in a strong start to the 2022 financial year as demand for the Company's products remains high.

Customers

The Company's largest three customers accounted for 17%, 14% and 8% of the Company's sales in 2021; 17%, 12% and 10% in 2020; and 18%, 14% and 7% in 2019.

Distribution

In the U.S. AMVAC predominantly distributes its products through national distribution companies and buying groups or co-operatives, which purchase AMVAC's goods on a purchase order basis and, in turn, sell them to retailers/growers/end-users.

Internationally, AMVAC BV has sales offices or wholly owned distributors in Mexico, Central America, Brazil, Australia, and India, and sales force executives or sales agents in several other territories. The Company's domestic and international distributors, agents and customers typically have long-established relationships with retailers/end-users, far-reaching logistics, transportation capabilities and/or customer service expertise. The markets for AVD's products vary by region, target crop, use and type of distribution channel. AVD's customers are experts at addressing these various markets.

Competition

In its many marketplaces, AVD faces competition from both domestic and foreign manufacturers. Many of our competitors are larger and have substantially greater financial and technical resources than AVD. AVD's capacity to compete depends on its ability to develop additional applications (including delivery systems and precision application technologies) for its current products and/or expand its product lines and customer base. AVD competes principally based on quality, product efficacy, price, technical service and customer support. In some cases, AVD has positioned itself in smaller niche markets, which are no longer addressed by larger companies. In other cases, for example in the Midwest corn and soybean markets, the Company competes directly against larger competitors.

Manufacturing

Through its six manufacturing facilities (see Item 2, Properties), AVD synthesizes many of the technical grade active ingredients that are in its end-use products. Further, the Company formulates and packages its end-use products at four of its own facilities or at the facilities of third-party formulators in the U.S. and at various international locations. In addition, the Company owns two biological fermentation sites, one site in the U.S., and one in Mexico, and, in addition, has a product manufacturing arrangement at a third-party facility in India.

Raw Materials

AVD utilizes numerous companies to supply the various raw materials and components used in manufacturing its products. Many of these materials are readily available from domestic sources. In those instances where there is a single source of supply or where the source is not domestic, AVD seeks to secure its supply by either long-term (multi-year) arrangements or purchasing on long lead times from its suppliers. Further, where the availability or cost of certain raw materials may be subject to the effect of tariffs and/or supply chain disruption, the Company may order goods at times or in volumes out of the ordinary course to optimize pricing and to ensure supply.

Intellectual Property

AVD's proprietary product formulations are protected, to the extent possible, as trade secrets and, to a lesser extent, by patents. Certain of the Company's closed delivery systems are patented, and the Company has both pending and issued patents relating to its equipment portfolio, particularly with respect to its SIMPAS and ULTIMUS technology. In addition, the Company owns multiple issued patents relating to both its low-impact Envance solutions as well as its Agrinos biological and microbial solutions. Further, AVD's trademarks bring value to its products in both domestic and foreign markets. AVD considers that, in the aggregate, its product registrations, trademarks, licenses, customer lists and patents constitute valuable assets. While it does not regard its current business as being materially dependent upon any single product registration, trademark, license, or patent, it believes that patents will play an increasingly important role in its developmental equipment and green solution technologies.

EPA Registrations

In the U.S., AVD's products also receive protection afforded by the terms of the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), pursuant to which it is unlawful to sell any pesticide in the U.S., unless such pesticide has first been registered by the U.S. Environmental Protection Agency ("USEPA"). Most of the Company's products that are sold in the U.S. are subject to USEPA registration and periodic re-registration requirements and are registered in accordance with FIFRA. This registration by USEPA is based, among other things, on data demonstrating that the product will not cause unreasonable adverse effects on human health or the environment, when used according to approved label directions. In addition, each state requires a specific registration before any of AVD's products can be marketed or used in that state. State registrations are predominantly renewed annually with a smaller number of registrations that are renewed on a multiple year basis. Foreign jurisdictions typically have similar registration requirements by statute.

In addition, certain of the Company’s biological products are labeled organic under the Organic Materials Review Institute (“OMRI”), Washington State Department of Agriculture (“WSDA”) and/or California Department of Food and Agriculture (“CDFA”) and, as such, are subject to the requirements of those certification standards, including with respect to raw materials and processes. As is the case with synthetic products, these biological products are also subject to specific labeling requirements that may vary from state to state.

The USEPA, state, and foreign agencies have required, and may require in the future, that certain scientific data requirements be performed on registered products sold by AVD. AVD, on its own behalf and in joint efforts with other registrants, has furnished, and is currently furnishing, required data relative to specific products. Under FIFRA, the federal government requires registrants to submit a wide range of scientific data to support U.S. registrations, including in the case of adding labeled uses. This requirement results in operating expenses in such areas as regulatory compliance, with USEPA and other such bodies in the markets in which the Company sells its products. In addition, at times, the Company is required to generate new formulations of existing products and/or to produce new products in order to remain compliant. The Company expensed \$16,568, \$15,613 and \$13,989, during 2021, 2020 and 2019, respectively, on these activities.

	2021	2020	2019
Registration	\$ 10,612	\$ 10,914	\$ 9,046
Product development	5,956	4,699	4,943
Total	<u>\$ 16,568</u>	<u>\$ 15,613</u>	<u>\$ 13,989</u>

Environmental

AVD is subject to numerous federal and state laws and governmental regulations concerning environmental matters and employee health and safety at its six manufacturing facilities both in the U.S. and abroad. The Company continually adapts its manufacturing, storage, transportation, handling and disposal processes to the environmental control standards of the various regulatory and other agencies to which it is subject. The USEPA and other foreign, federal and state agencies have the authority to promulgate regulations that could have an impact on the Company’s operations.

AVD expends substantial funds to minimize the risk of discharge of materials in the environment and to comply with the governmental regulations relating to protection of the environment. Wherever feasible, the Company recovers and recycles raw materials and increases product yield in order to partially offset increasing pollution abatement costs.

The Company is committed to a long-term environmental protection program that reduces emissions of hazardous materials into the environment, as well as to the remediation of identified existing environmental concerns.

Human Capital Resources

We believe that, beyond being essential to our operations, our people have inestimable worth independent of our business. As outlined in our Human Rights Policy (see, www.american-vanguard.com under ESG tab), we believe that it is fundamental to our corporate responsibility and, indeed, to our humanity, that we recognize, respect and nurture the freedom and dignity of all persons. Accordingly, we have insinuated that belief throughout the fabric of our operations in our approach toward our employees. Indeed, the first two core values underlying our commitment to sustainability (see, Update to Corporate Sustainability Report, www.american-vanguard.com under ESG tab) are “Safety First” – which is a culture that begins with highly-regulated manufacturing plants, continues into the design of science-backed products and extends into market-leading delivery systems – and “Making a Difference” – under which, by rewarding achievement and giving our employees a voice, we attract diverse employees who want to make a difference in their careers, in the company and in the communities that we serve.

Our Human Capital program consists of the following elements:

- Board Oversight – through our Nominating and Corporate Governance Committee (“N&CG”), our board of directors oversees human capital-related risks and opportunities. At least annually, the N&CG Committee requires that management update succession planning for key executives, including with respect to planning for the future with a commitment toward diversity, equity and inclusion.
- Strategy – the Company’s human capital strategy has two primary elements: giving our employees a voice and providing them with generous benefits (including an unrivalled health benefits plan and awards of common stock to the entire workforce). As we have covered in our Update to Corporate Sustainability Report, our company is a destination for highly qualified employees who are drawn to a workplace where they can make a difference. Our managerial approach is that our functions work in a collaborative manner – cutting across departmental lines to arrive at better solutions with a high level of efficiency. This strategy has enabled the Company to maximize retention, even in an increasingly competitive employment market.

- Compensation – as mentioned in our Strategy above, compensation is an essential element of our human capital approach. During the pandemic in the midst of the so-called “Great Resignation” that affected many industries, we took measures to incentivize our workforce to remain with us, including across-the-board wage increases in certain of our manufacturing facilities. To the extent that our highly skilled personnel are being recruited by other companies, we endeavor to keep an open conversation on their needs and, where appropriate, have increased their total compensation (through a combination of wage, stock and/or vacation) to retain them.
- Voice – our management style is to solicit good ideas from employees, involve them in implementation and give them recognition for ideas that succeed. For example, personnel from virtually any department (be it sales, technology, product development or otherwise) can submit ideas to our Innovation Review Committee (“IRC”) for consideration and potential funding. The IRC continues to be a source of new product ideas that has enabled us to launch several new formulations and other solutions on an annual basis. Similarly, our Beekeeper platform is a company-only social media channel on which employees anywhere in the world can report on their accomplishments, commendations of others and local developments.
- Diversity, Equity and Inclusion (“DEI”) – the Company continues to expand its DEI program. In 2021, with the retirement of Lawrence Clark from our board of directors, the Company called upon the Latino Corporate Directors Association to help recruit Marisol Angelini as a new director. With Ms. Angelini’s addition to the board, three of nine members (33%) of our board are female and three of nine (again, 33%) are from underrepresented groups (LGBTQ, Middle Eastern and Latinx). Based upon the Company’s most current EEO-1 (“Equal Employment Opportunity”) Report, representation of African Americans in our domestic workforce exceeds the prevalence of that group in the national population, while representation of Hispanic personnel is slightly below the national average. Nevertheless, during 2022, the Company is working on a plan to advance its commitment to DEI throughout the workforce.

The Company employed 804 employees as of December 31, 2021, and 771 employees as of December 31, 2020. From time to time, due to the seasonality of its business, AVD uses temporary contract personnel to perform certain duties primarily related to packaging of its products. None of the Company’s employees are subject to a collective bargaining agreement. The Company believes it maintains positive relations with its employees.

Domestic operations

AMVAC is a California corporation that was incorporated under the name of Durham Chemical in August 1945. The name of the corporation was subsequently changed to AMVAC in January 1971. As the Company’s main operating subsidiary, AMVAC owns and/or operates the Company’s domestic manufacturing facilities. AMVAC manufactures, formulates, packages and sells its products in the U.S. and is a wholly owned subsidiary of AVD.

GemChem is a California corporation that was incorporated in 1991 and was subsequently purchased by the Company in 1994. GemChem sells into the pharmaceutical, cosmetic and nutritional markets and, in addition, purchases key raw materials for the Company. GemChem is a wholly owned subsidiary of AVD.

DAVIE owns real estate for corporate use only. The site is the home to the Company’s research center and provides accommodation for the Company’s production control team. DAVIE is a wholly owned subsidiary of AVD.

On October 2, 2017, AMVAC purchased substantially all the assets of OHP, a domestic distribution company specializing in products for the turf and ornamental market. OHP markets and sells end use products for third parties, either under third-party brands or else as its own label products.

Envance is a Delaware Limited Liability Company that was formed in 2012 by AMVAC and joint venture partner TyraTech. Envance and TyraTech became wholly owned subsidiaries of the Company on November 9, 2018. Envance has the rights to develop and commercialize pesticide products and technologies based on TyraTech’s intellectual property. Products are made from natural oils in global consumer, commercial, professional, crop protection and seed treatment markets. Envance is taking products to market primarily by licensing its intellectual property to third parties.

International operations

In July 2012, the Company formed AMVAC CV, which is incorporated in the Netherlands, for the purpose of managing foreign sales on behalf of the Company. AMVAC CV is owned jointly by AMVAC as the general partner, and AVD International, LLC (also formed in July 2012 as a wholly owned subsidiary of AMVAC), as the limited partner, and is a wholly owned subsidiary of AVD. In November 2019, AMVAC Hong Kong was formed and is wholly owned subsidiary of AMVAC. AMVAC Hong Kong took over the role of AMVAC CV as of January 1, 2020.

AMVAC BV is a registered Dutch private limited liability company that was formed in July 2012. AMVAC BV is located in the Netherlands and is wholly owned by AMVAC CV. During 2021, the international business sold the Company’s products in 54 countries, as compared to 55 countries in 2020.

AMVAC M is a wholly owned subsidiary of AMVAC BV and was originally formed in 1998 (as Quimica Amvac de Mexico S.A. de C.V and subsequently changed to AMVAC Mexico Sociedad de Responsabilidad Limitada “AMVAC M”) to conduct the Company’s business in Mexico.

AMVAC Sgpr is a wholly owned subsidiary of AMVAC BV and was formed on April 12, 2016. This new entity was formed to conduct the Company’s business in the Asia Pacific and China region.

On October 27, 2017, AMVAC BV purchased 100% of the stock of AgriCenter, which owned shares in subsidiaries located in Costa Rica, Panama, Nicaragua, Honduras, the Dominican Republic, Mexico, Guatemala, and El Salvador. These affiliated entities, collectively known as AgriCenter, market, sell and distribute end-use chemicals, including the Company’s own products, and biological products throughout Central America primarily for crop applications.

On January 10, 2019, AMVAC BV acquired 100% of the stock of Agrovant and Defensive, two distribution companies based in Brazil. Agrovant and Defensive market and distribute crop protection products and micronutrients with focus on the fruit and vegetable market segments throughout Brazil. On December 31, 2020, Agrovant and Defensive merged and renamed the resulting entity, AMVAC 3p.

On October 8, 2020, American Vanguard Australia Pty Ltd acquired 100% of the stock of AgNova, an Australian company that sources, develops, and distributes specialty crop protection and production solutions for agricultural and horticultural producers, and for selected non-crop users.

On October 2, 2020, the Company’s principal operating subsidiary, AMVAC, completed the purchase of all outstanding shares of Agrinos and certain intellectual property rights. Agrinos is a fully integrated biological input supplier with proprietary technology, internal manufacturing, and global distribution capabilities and has operating entities in the U.S., Mexico, India, Brazil, China, Ukraine, and Spain.

The Company classifies as international sales all products bearing foreign labeling shipped to a foreign destination.

	2021	2020	2019
International sales	\$ 214,635	\$ 186,980	\$ 185,961
Percentage of net sales	38.5%	40.8%	39.7%

The Company’s Operations in a Pandemic

Since the start of the coronavirus pandemic early in 2020, the Company has made sustained efforts to ensure the health and safety of the workforce while ensuring continuity of the business, which, under applicable federal guidelines (<https://www.cisa.gov>) is part of the nation’s critical infrastructure (as part of the “Food and Agriculture,” “Chemical” and “Public Works and Infrastructure Support Services” sectors). Our network of international subsidiaries is accorded similar status by governments in the territories in which they operate. In the workplace, the Company has designed and implemented protocols for social distancing, made provisions for the workforce to work remotely where possible, and established quarantine policies for those who present COVID-like symptoms or may have been in contact with those who have. Further, the Company keeps current with local, state, federal and international laws and restrictions that could affect the business and provide real-time information to the workforce. The Company has also prepared contingency plans to permit the continued operation of its factories, in the event that there are critical staffing issues due to attrition. Further, the Company continuously monitors supply chain, transport, logistics and border closures and has reached out to third parties to make clear that the Company is continuing to operate, and that it has its own policies relating to health and is committed to compliance with COVID-19 policies of its business partners.

As has been the case with many other employers, since the start of 2021, the Company has encouraged its workforce to receive vaccinations against COVID-19 through various means, including incentive programs. The surge of the Delta variant in early 2021 had a comparatively low impact on the Company’s workforce. However, the Omicron variant, which began to spread throughout the world in late 2021, proved to be transmissible to people who were vaccinated or unvaccinated. As a result, like many employers, the Company experienced a surge in COVID-19 infections at the end of the fourth quarter in 2021 carrying over into the first quarter of 2022. Based upon tracking and tracing, we believe that most of these cases came from community (as opposed to workplace) transmission. Further, compared to the Delta surge and earlier variants, these cases typically presented with mild symptoms. All told, the Company has been able to manage its business with minimal impact during the years ended December 31, 2021 and 2020.

As of this writing, the Omicron surge is dropping dramatically in many regions, including the U.S. Barring the advent of another variant, between natural immunity from infection and vaccine immunity, populations in many countries will be increasingly less vulnerable to coronavirus. However, the efficacy of boosters, variability in social restrictions and evolution of the virus are not yet known. Consequently, the Company is unable to predict the ultimate impact that the pandemic may have on its future financial condition, results of operations and cash flows in the near- to mid-term. The Company continues to monitor its business for adverse impacts of the pandemic, including volatility in the foreign exchange markets, demand, supply-chain disruptions in certain markets, and increased costs of employee safety, among others.

Risk Management

The Company's Environmental, Social and Corporate Governance ("ESG") strategy is fully described on our website (www.american-vanguard.com); just click on the "ESG" tab. The reader will also find the Company's updated Corporate Sustainability Report (dated February 2022) under the same tab.

Available Information

The Company makes available free of charge (through its website, www.american-vanguard.com), its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with the Securities and Exchange Commission ("SEC"). All reports filed with the SEC are available free of charge on the SEC website, www.sec.gov. Also available free of charge on the Company's website are the Company's Audit Committee, Compensation Committee, Finance Committee and Nominating and Corporate Governance Committee Charters, the Company's Corporate Governance Guidelines, the Company's Code of Conduct and Ethics, and the Company's Employee Complaint Procedures for Accounting and Auditing Matters. Beneath the ESG tab at that site, you will also find links to the Company's Corporate Sustainability Reports, Climate Change Commitment and Human Rights Policy. The Company's Internet website and the information contained therein or incorporated therein are not intended to be incorporated into this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

Regulatory/Legislative/Litigation Risks

The regulatory climate remains challenging to the Company's interests both domestically and internationally—Various agencies within the U.S. (both federal and state) and foreign governments continue to exercise increased scrutiny in permitting continued uses (or the expansion of such uses) of many chemistries, including several of the Company's products and, in some cases, have initiated or entertained challenges to these uses. The challenge of the regulatory climate is more pronounced in certain geographical regions (outside the U.S.) where the Company faces resistance to the continued use of certain of its products. For example, the European Union ("EU") employs a hazard-based analysis when considering whether product registrations can be maintained; under this approach, EU regulatory authorities typically do not weigh benefit against risk in their assessments and routinely cancel products for which a safer alternative is available, notwithstanding the benefit of the cancelled product. There is no guarantee that this regulatory climate will change in the near term or that the Company will be able to maintain or expand the uses of many of its products in the face of such regulatory challenges.

The Russian invasion of the Ukraine may expand into a broader international conflict that could adversely affect multiple channels of commerce and markets. While business operations relating to the Ukraine constitute an immaterial part of the Company's overall business, there is no guarantee that the current conflict will not draw military intervention from other countries or retaliation from Russia, which, in turn, could lead to a much larger conflict. If such escalation should occur, supply chain, trade routes and markets currently served by the Company could be adversely affected, which, in turn, could materially, adversely affect the Company's business operations and financial performance.

Product liability judgments on glyphosate and cases involving other pesticides by domestic courts present a litigation risk to companies in this industry—Multiple judgments have been rendered by domestic courts in product liability cases against Bayer/Monsanto in connection with injuries allegedly arising from exposure to the herbicide product, glyphosate. The basis was purported carcinogenicity based largely upon the findings of a certain international organization, despite significant scientific evidence to the contrary. While the Company does not sell glyphosate, the theory of these results could put one or more of the Company's products at risk. Further, a number of product liability cases involving paraquat have been filed in domestic courts. While the Company is not a party to these cases and discontinued its limited sales of this herbicide shortly after acquiring an end-use registration as part of a larger acquisition, there is no guarantee that one or more product liability actions would not be brought against the Company on a similar basis, and it is possible that adverse rulings in any such actions could have a material adverse effect upon the Company's financial performance in future reporting periods.

The trend of passing pesticide "ban-bills" in various states could put one or more of the Company's products at risk—In certain states, including Maryland and New York, state and/or local legislatures have passed legislation banning the use of specific pesticides, such as chlorpyrifos, or pesticide in general, in spite of valid registrations at USEPA and/or the equivalent state agency. While the Company does not sell chlorpyrifos products, there is no guarantee that one or more of its registered products would not be targeted in state or local legislation of this nature. Further, such legislation could have a material adverse effect upon the Company's financial performance in future reporting periods.

Use of the Company's products is subject to continuing challenges from activist groups—Use of agrochemical products, including the Company's products, is regularly challenged by activist groups in many jurisdictions under a multitude of federal, state and foreign statutes, including FIFRA, the Food Quality Protection Act, Endangered Species Act ("ESA") and the Clean Water Act, to name a few. These challenges typically take the form of lawsuits or administrative proceedings against the USEPA and/or other federal, state or foreign agencies, the filing of amicus briefs in pending actions, the introduction of legislation that is inimical to the Company's interests, and/or adverse comments made in response to public comment invited by regulatory agencies in the course of registration, re-registration or label expansion. The most prominent of these actions include a line of cases under which environmental groups have sought to suspend, cancel or otherwise restrict the use of pesticides that have been approved by USEPA on the ground that that agency failed to confer with the National Marine Fishery Service and/or the Fish and Wildlife Service under the ESA with respect to biological opinions relating to the use of such products. While industry has been active in defending registrations and proposing administrative and legislative approaches to address serious resource issues at the affected agencies, these cases continue to be brought. It is possible that one or more of these challenges could succeed, resulting in a material adverse effect upon one or more of the Company's products and consolidated financial statements.

USEPA has proposed further limitations and taken action on the continued registration of organophosphates— In September 2015, the USEPA published in the Federal Register a memorandum entitled, “Literature Review on Neurodevelopmental Effects & FQPA Safety Factor Determination for the Organophosphate Pesticides,” in which it adopted a position recommending the application of a 10X safety factor under the FQPA (Food Quality Protection Act) in light of the alleged possibility of neurodevelopmental harm to women and children based on epidemiological data. Since that time, in the face of objection from industry, the agency has applied this safety factor to all registered Organophosphate Pesticides (“Ops” or “OP”), including those owned by the Company, as they have come up for review or renewal. The Company, like many in our industry, believes that applying this safety factor is not based upon sound science and that the limited studies upon which the agency is relying (for which raw data is not available even to the agency) do not establish a causal link between the perceived harm and the use of its products. In addition, finding that the tolerances for chlorpyrifos (an organophosphate not sold by the Company) that had been established under FFDCA could not be deemed with reasonable certainty to cause no harm, USEPA revoked those tolerance factors and consequently cancelled the registrations for chlorpyrifos. There is no guarantee that USEPA will not employ a similar standard of review against one or more of the Company’s organophosphates. Accordingly, the Company intends to take all action necessary to defend its registrations. We have been joined in this effort by other companies that are similarly concerned about the potential impact of USEPA’s action. Nevertheless, there is no guarantee that the Company’s actions will alter the course that USEPA has proposed; if the agency’s position becomes final, some uses of the Company’s OP products could be limited or cancelled. Such action could have a material adverse effect upon the Company’s financial performance in future reporting periods.

The distribution and sale of the Company’s products are subject to prior governmental approvals and thereafter ongoing governmental regulation—The Company’s products are subject to laws administered by federal, state and foreign governments, including regulations requiring registration, approval and labeling of its products. The labeling requirements restrict the use of, and type of, application for our products. More stringent restrictions could make our products less available, which would adversely affect our revenues and profitability and cash flows. Substantially all the Company’s products are subject to the USEPA (and/or similar agencies in the various territories or jurisdictions in which we do business) registration and re-registration requirements and are registered in accordance with FIFRA or similar laws. Such registration requirements are based, among other things, on data demonstrating that the product will not cause unreasonable adverse effects on human health or the environment when used according to approved label directions. All states, where any of the Company’s products are used, also require registration before products, such as the Company sells, can be marketed or used in that state. Governmental regulatory authorities have required, and may require in the future, that certain scientific data requirements be fulfilled on the Company’s products. The Company, on its behalf and also in joint efforts with other registrants, has furnished, and is currently furnishing certain required data relative to its products. There can be no assurance, however, that the USEPA or similar agencies will not request that certain tests or studies be repeated, or that more stringent legislation or requirements will not be imposed in the future. The Company can provide no assurance that any testing approvals or registrations will be granted on a timely basis, if at all, or that its resources will be adequate to meet the costs of regulatory compliance.

The manufacturing of the Company’s products is subject to governmental regulations— The Company currently owns and operates five manufacturing facilities which are located in Los Angeles, California; Axis, Alabama; Hannibal, Missouri; Marsing, Idaho; Clackamas, Oregon; and Etchojoa, Mexico (the “Facilities”). The Facilities operate under the laws and regulations imposed by relevant country, state and local authorities. The manufacturing of key ingredients for certain of the Company’s products occurs at the Facilities. An inability to renew or maintain a license or permit, or a significant increase in the fees for such licenses or permits, could impede the Company’s manufacture of one or more of its products and/or increase the cost of production; this, in turn, would materially and adversely affect the Company’s ability to provide customers with its products in a timely and affordable manner.

Pandemic/Climate Risks

The COVID-19 pandemic is creating risk, uncertainties and adverse conditions in many industries both here and abroad. The Company is closely monitoring the impact of the COVID-19 pandemic on all aspects of its business, including how the pandemic will impact its customers, business partners, and employees. While the Company did not incur significant disruptions from the COVID-19 pandemic during the years ended December 31, 2021 and 2020, the Company is unable to predict the impact that the pandemic will have on its future financial condition, results of operations and cash flows due to numerous uncertainties. The extent to which the COVID-19 pandemic impacts the Company’s operations and those of its customers will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the scope, severity and duration of the pandemic, the actions taken to contain the pandemic or mitigate its impact, and the direct and indirect economic effects of the pandemic and containment measures, among others. There is no guarantee that the Company will be able to operate without material disruption for the duration of the pandemic or that its financial conditions and results of operations and cash flows will not be materially adversely affected by the pandemic in future periods.

Disruption in the global supply chain is creating delays, unavailability and adverse conditions for our industry, including significant price increases especially with regard to ocean bound shipments. With the prolongation of the coronavirus pandemic, the global supply chain has been under increased stress stemming from container shortages, a lack of domestic truck drivers and a shift in consumer buying habits. Consequently, ocean cargo both inbound to, and, in some cases, outbound from, the U.S. has experienced significant delays, while domestic ports and regional warehouses have been filled beyond capacity. To date, while experiencing disruptions in the supply of raw materials, intermediates, finished goods and packaging, the Company has been able to carry on business without a material adverse effect upon its overall operations or financial performance. Further, there is no guarantee that the supply chain condition will materially improve any time soon or that the company will continue to avoid material disruption. Such disruption could have a material adverse effect on the company's operations, financial condition or cash flows.

Climate Change may adversely affect the Company's business—Over the course of the past several years, global climate conditions have become increasingly inconsistent, volatile and unpredictable. Many of the regions in which the Company does business have experienced excessive moisture, cold, drought and/or heat of an unprecedented nature at various times of the year. In some cases, these conditions have either reduced or obviated the need for the Company's products, whether pre-plant, at-plant, post-emergent or at harvest. Further, the random nature of climactic change has made it increasingly difficult to forecast market demand and, consequently, financial performance, from year-to-year. There is no guarantee that climate change will abate in the near future, and it is possible that such change will continue to hinder the Company's ability to forecast its sales performance with accuracy and otherwise adversely affect the Company's financial performance.

The Company's business may be adversely affected by weather effects and commodity prices—Demand for many of the Company's products tends to vary with weather conditions and weather-related pressure from pests. Adverse weather conditions, then, may reduce the Company's revenues and profitability. In light of the possibility of adverse seasonal effects, there can be no assurance that the Company will maintain sales performance at historical levels in any particular region. Similarly, demand for the Company's products used in row crops tends to vary with the commodity prices of those crops in the U.S., particularly corn, soybeans and cotton. These prices may be driven in part by weather, pest pressure, the domestic farm economy and international markets (e.g., yield and pricing from similar crops grown in Brazil). There is no guarantee that the U.S. farm economy and row crop commodity prices will maintain sufficient strength and stability to support the Company's products at or above historical levels.

The Company may be subject to environmental liabilities—The Company is fully committed toward minimizing the risk of discharge of materials into the environment and to complying with governmental regulations relating to protection of the environment, its neighbors and its workforce. Nevertheless, federal and state authorities may seek fines and penalties for any violation of the various laws and governmental regulations. In addition, while the Company continually adapts its manufacturing processes to the environmental control standards of regulatory authorities, it cannot entirely eliminate the risk of accidental contamination or injury from hazardous or regulated materials. In short, the Company may be held liable for significant damages or fines relating to any environmental contamination, injury, or compliance violation which could have a material adverse effect on the Company's consolidated financial condition, statements of operations and cash flows.

Acquisition/Investment Risks

Newly acquired businesses or product lines may not generate forecasted results—While the Company conducts due diligence using a combination of internal and third party resources and applies what it believes to be appropriate criteria for each transaction before making acquisitions, there is no guarantee that a business or product line acquired by the Company will generate results that meet or exceed results that were forecasted by the Company when evaluating the acquisition. There are many factors that could affect the performance of a newly acquired business or product line. While the Company uses assumptions that are based upon due diligence and other market information in valuing a business or product line prior to concluding an acquisition, actual results generated post-closing could vary widely from the Company's forecast and, as such, could have a material effect upon the Company's overall financial performance.

The Company's investment in foreign businesses may pose additional risks—With the expansion of its footprint internationally, the Company now carries on business at a material level in some jurisdictions that have a history of political, economic or currency-related instability and customers with a potentially higher risk profile regarding accounts receivable collectivity compared to the Company's legacy business. While such instability may not be present at the current time, there is no guarantee that conditions will not change in one or more jurisdictions quickly and without notice, nor is there any guarantee that the Company would be able to recoup its investment in such territories in light of such changes and potential losses due to political factors, economic factors, devaluation of local currencies, or the collectability risk from customers. Adverse changes of this nature could have a material effect upon the Company's overall financial performance.

The Company's investment in technology may not generate forecasted returns—The Company has had a history of investing in technological innovation, including with respect to product delivery systems, natural oil technology and biologicals, as one of its core strategies. These investments are based upon the premise that new technology will allow for safer handling or lower overall toxicity profile of the Company's product portfolio, appeal to regulatory agencies and the market we serve, gain commercial acceptance, and command a return that is sufficiently in excess of the investment. However, there is no guarantee that a new technology will be successfully commercialized, generate a material return or maintain market appeal. Further, many types of development costs must be expensed in the period in which they are incurred. This, in turn, tends to put downward pressure on period profitability. There can be no assurance that these expenses will be recovered through successful long-term commercialization of a new technology.

The Company's growth has been fueled in part by acquisitions—Over the past few decades, the Company's growth has been driven by acquisitions and licensing of both established and developmental products from third parties. There is no guarantee that acquisition targets or licensing opportunities meeting the Company's investment criteria will remain available or will be affordable. If such opportunities do not present themselves, then the Company may be unable to duplicate historical growth rates in future years.

The Company is dependent upon sole source suppliers for certain of its raw materials and active ingredients—There are a limited number of suppliers of certain important raw materials used by the Company in a number of its products. Certain of these raw materials are available solely from single sources either domestically or overseas. In connection with supply chain disruptions in 2021, phosphorus and related compounds were increasingly difficult to source for our entire industry; ensuring a continuous supply required extraordinary efforts both with respect to sourcing and production planning. That said, there is no guarantee that any of our suppliers will be willing or able to supply these products to the Company reliably, continuously and at the levels anticipated by the Company or required by the market. If these sources prove to be unreliable and the Company is not able to supplant or otherwise second source these products, it is possible that the Company will not achieve its projected sales which, in turn, could adversely affect the Company's consolidated financial statements.

The Company faces competition in certain markets from new technologies and demand for organically produced food—The Company faces competition from larger companies that market new chemistries and other similar technologies in certain of the crop protection sectors in which the Company competes. There is no guarantee that the Company will maintain its market share or pricing levels in sectors that are subject to competition from companies that market new technologies. Further, it is possible that increased demand for organic crops may, over time, reduce the demand for the Company's products.

The Company faces competition from generic competitors that source product from countries having lower cost structures—The Company continues to face competition from competitors around the globe that may enter the market through either offers to pay data compensation, or similar means in foreign jurisdictions, and then subsequently source material from countries having lower cost structures (typically India and China). These competitors typically tend to operate at thinner gross margins and, with low costs of goods, tend to drive pricing and profitability of subject product lines downward. There is no guarantee that the Company will maintain market share and pricing when facing such generic competitors, or that such competitors will not offer generic versions of the Company's products in the future.

The Company's key customers typically carry competing product lines and may be influenced by the Company's larger competitors—A significant portion of the Company's products are sold to national distributors in the U.S., which also carry product lines of competitors that are much larger than the Company. Typically, revenues from the sales of these competing product lines and related program incentives constitute a greater part of our distributors' income than do revenues from sales and program incentives arising from the Company's product lines. With the recent consolidation among domestic distribution companies, these considerations have become more pronounced. In light of these facts, there is no assurance that such customers will continue to market our products aggressively or successfully, or that the Company will be able to influence such customers to continue to purchase our products instead of those of our competitors.

Industry consolidation may threaten the Company's position in various markets—The global agricultural chemical industry continues to undergo significant consolidation. Many of the Company's competitors have grown or are expected to grow through mergers and acquisitions. As a result, these competitors will tend to be in position to realize greater economies of scale, offer more diverse portfolios and thereby exert greater influence throughout the distribution channels. Consequently, the Company may find it more difficult to compete in various markets. While such merger activity may generate acquisition opportunities for the Company, there is no guarantee that the Company will benefit from such opportunities. Further, there is a risk that the Company's future performance may be hindered by the growth of its competitors through consolidation.

The Company is dependent on a limited number of customers, which makes it vulnerable to the continued relationship with and financial health of those customers—Our top three customers accounted for 39% of the Company’s sales in 2021, 2020 and 2019. The Company’s future prospects may depend on the continued business of such customers and on our continued status as a qualified supplier to such customers. The Company cannot guarantee that these key customers will continue to buy products from us at current levels. The loss of a key customer could have a material adverse effect on the Company’s consolidated financial statements.

General Risks

The carrying value of certain assets on the Company’s consolidated balance sheets may be subject to impairment depending upon market trends and other factors—The Company regularly reviews the carrying value of certain assets, including long-lived assets, inventory, fixed assets and intangibles. Depending upon the class of assets in question, the Company takes into account various factors including, among others, sales, trends, market conditions, cash flows, profit margins and the like. Based upon this analysis, where circumstances warrant, the Company may leave such carrying values unchanged or adjust them as appropriate. There is no guarantee that these carrying values can be maintained indefinitely, and it is possible that one or more such assets could be subject to impairment which, in turn, could have an adverse impact upon the Company’s consolidated financial statements.

The Company’s computing systems are subject to cyber security risks—In the course of its operations the Company relies on its computing systems, including access to the internet, the use of third-party applications and the storage and transmission of data through such systems. While the Company has implemented security measures to protect these systems, there is no guarantee that a third-party will not penetrate these defenses through hacking, phishing or otherwise and either compromise, corrupt or shut down these systems. Further, in the event of such incursion it is possible that confidential business information and private personal data could be taken. Such an event could adversely affect both the Company’s ability to operate, its reputation with key stakeholders and its overall financial performance.

Reduced financial performance may limit the Company’s ability to borrow under its credit facility—The Company has historically grown net sales and net income through the expansion of current product lines, the acquisition of product lines from third parties and the acquisition of both domestic and international distributors with strong niche market positions. In order to finance such acquisitions, the Company has drawn upon its senior credit facility. However, the Company’s borrowing capacity under the senior credit facility depends, in part, upon its satisfaction of a negative covenant that sets a maximum ratio of borrowed debt to earnings (as measured over the trailing 12-month period). There is no guarantee that the Company will continue to generate earnings necessary to ensure that it has sufficient borrowing capacity to support future acquisitions or that, when necessary, the lender group will amend the senior credit facility to provide for such borrowing capacity. Further, despite the Company’s long-standing relationship with its lenders, in light of the uncertainties in global financial markets, there is no guarantee that the Company’s lenders will be either willing or able to continue lending to the Company at such rates and in such amounts as may be necessary to meet the Company’s working capital needs.

The Company is subject to taxation related risks in multiple jurisdictions—The Company is a U.S. based multinational company subject to tax in multiple U.S. and foreign tax jurisdictions. Significant judgment is required in determining our global provision for income taxes, deferred tax assets or liabilities and in evaluating our tax positions on a worldwide basis. While we believe our tax positions are consistent with the tax laws in the jurisdictions in which we conduct our business, it is possible that these positions may be contested or overturned by jurisdictional tax authorities, which may have a significant impact on our global provision for income taxes. Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. In 2017, the U.S. enacted significant tax reform, and in the long-term certain provisions of the new law may adversely affect us. In addition, governmental tax authorities are increasingly scrutinizing the tax positions of companies. Many countries in the EU, as well as a number of other countries and organizations such as the Organization for Economic Cooperation and Development, are actively considering changes to existing tax laws that, if enacted, could increase our tax obligations in countries where we do business. If U.S. or other foreign tax authorities change applicable tax laws, our overall taxes could increase, and our business, financial condition, results of operations, or cash flows may be adversely impacted.

To the extent that capacity utilization is not fully realized at its manufacturing facilities, the Company may experience lower profitability—While the Company endeavors continuously to maximize utilization of its manufacturing facilities, our success in these endeavors is dependent upon many factors, including fluctuating market conditions, product life cycles, weather conditions in our key markets, availability of raw materials, manufacturing equipment performance, retention of the workforce and regulatory constraints, among other things. There can be no assurance that the Company will be able to maximize the utilization of capacity at its manufacturing facilities. Underutilization of such manufacturing resources could have a material adverse effect upon the Company’s financial performance.

The Company’s continued success depends, in part, upon a limited number of key employees—Within certain functions, the Company relies heavily on a small number of key employees to manage ongoing operations and to perform strategic planning. In some cases, there are no internal candidates who are qualified to succeed these key personnel in the short term. In the event that the Company were to lose one or more key employees, there is no guarantee that Company could replace them with people having comparable skills. Further, the loss of key personnel could adversely affect the operation of our business.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2 PROPERTIES

AMVAC owns in fee the Facility constituting approximately 152,000 square feet of improved land in Commerce, California (“Commerce”) on which its West Coast manufacturing, some of its warehouse facilities and some of its manufacturing administrative offices are located.

DAVIE owns in fee approximately 72,000 square feet of warehouse, office and laboratory space on approximately 118,000 square feet of land in Commerce, California, which is leased to AMVAC. In 2013, the Company made a significant investment in the Glenn A. Wintemute Research Center, which houses the Company’s primary research laboratory supporting synthesis, formulation and other new product endeavors.

In 2001, AMVAC completed the acquisition of a manufacturing facility (the “Axis Facility”) from E.I. DuPont de Nemours and Company (“DuPont”). The Axis Facility was one of three such units located on DuPont’s 510-acre complex in Axis, Alabama. The acquisition consisted of a long-term ground lease of 25 acres and the purchase of all improvements thereon. The facility is a multi-purpose plant designed for synthesis of active ingredients and formulation and packaging of finished products. In 2018, FMC Corporation acquired from DuPont a business unit, which held, among other things, the Axis Facility. Prior to expiration of the lease, AMVAC and FMC negotiated the terms of a new lease, which has a term of 15 years and the option to renew for two, 5-year periods.

On December 28, 2007, AMVAC purchased certain manufacturing assets relating to the production of Thimet and Counter and located at BASF’s multi-plant facility situated in Hannibal, Missouri (the “Hannibal Site”). Subject to the terms and conditions of the Agreement, AMVAC purchased certain buildings, manufacturing equipment, office equipment, fixtures, supplies, records, raw materials, intermediates and packaging constituting the “T/C Unit” of the Hannibal Site. The parties entered into a ground lease and a manufacturing and shared services agreement, under which BASF continues to supply various shared services to AMVAC for the Hannibal Site.

On March 7, 2008, AMVAC acquired from Bayer CropScience Limited Partnership, (“BCS LP”), a U.S. business of Bayer CropScience GmbH, a facility (the “Marsing Facility”) located in Marsing, Idaho, which consists of approximately 17 acres of improved real property. The Marsing Facility is engaged in the blending of liquid and powder raw materials and the packaging of some of the Company’s finished goods inventory in liquid, powder and pelletized formulations which are sold both in the U.S. and internationally. In addition, during 2019, the Company purchased approximately three acres of unimproved real estate immediately adjacent to the Marsing Facility for potential storage and operational use in the future.

On October 2, 2020, AMVAC completed the purchase of all outstanding shares of Agrinos which is a fully integrated biological input supplier with proprietary technology, internal manufacturing, and global distribution capabilities. Its High Yield Technology® product platform works in conjunction with other nutritional crop inputs to increase crop yield, improve soil health and reduce the environmental footprint of traditional agricultural practices. Agrinos has two primary biological production facilities, a state-of-the-art microbial fermentation facility based in Clackamas, Oregon, and a facility in Sonora, Mexico. The Clackamas and Sonora facilities are used as both manufacturing sites, and operational centers for global supply chain and logistics.

AVD regularly adds chemical processing equipment to enhance or expand its production capabilities. The Company believes its facilities are in good operating condition, are suitable and adequate for current needs and have flexibility to change products. Facilities and equipment are insured against losses from fire as well as other usual business risks. The Company knows of no material defects in title to, or encumbrances on, any of its properties except that substantially all of the Company’s assets are pledged as collateral under the Company’s credit facility agreements with its primary lender group. For further information, refer to Note 3 of the Notes to the Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.

AVD owns approximately 42 acres of unimproved land in Texas for possible future expansion.

The Company leases approximately 19,953 square feet of office space located at 4695 MacArthur Court in Newport Beach, California. In 2020, the lease was amended and was extended to expire on June 30, 2026. The premises have served as the Company’s corporate headquarters since 1995.

The facilities occupied by GemChem, OHP, Envance and TyraTech (Envance and TyraTech are co-located), AMVAC BV, AMVAC M, AMVAC CR Srl, AMVAC Sgpr, AgNova, Agrinos, AMVAC 3p and AgriCenter, consist of administration, development centers (in the case of Envance and TyraTech) and/or sales offices which are leased. In addition, AMVAC 3p leases warehouse space in Jaboticabal, Brazil.

ITEM 3 LEGAL PROCEEDINGS

Please refer to Note 5 of the Notes to the Consolidated Financial Statements in Part II, item 8 of this Annual Report on Form 10-K.

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

Effective March 7, 2006, the Company listed its \$0.10 par value common stock ("Common Stock") on the New York Stock Exchange under the ticker symbol AVD. From January 1998 through March 6, 2006, the Common Stock was listed on the American Stock Exchange under the ticker symbol AVD. The Company's Common Stock traded on The NASDAQ Stock Market under the symbol AMGD from March 1987 through January 1998.

Holdings

As of March 3, 2022, the number of stockholders of the Company's Common Stock was approximately 6,296, which includes beneficial owners with shares held in brokerage accounts under street name and nominees.

Dividends

The Company has issued a cash dividend in each of the last twenty-four years dating back to 1996. Cash dividends declared during the past three years are summarized in the table below.

Declaration Date	Distribution Date	Record Date	Dividend Per Share	Total Paid
December 13, 2021	January 10, 2022	December 27, 2021	\$ 0.020	\$ 594
September 13, 2021	October 15, 2021	October 1, 2021	0.020	594
June 8, 2021	July 8, 2021	June 24, 2021	0.020	600
March 10, 2021	April 15, 2021	March 15, 2021	0.020	596
Total 2021			\$ 0.080	\$ 2,384
December 7, 2020	January 6, 2021	December 23, 2020	\$ 0.020	\$ 592
March 9, 2020	April 16, 2020	March 26, 2020	0.020	586
Total 2020			\$ 0.040	\$ 1,178
December 9, 2019	January 9, 2020	December 26, 2019	\$ 0.020	\$ 582
September 16, 2019	October 17, 2019	October 3, 2019	0.020	581
June 10, 2019	July 12, 2019	June 28, 2019	0.020	580
March 6, 2019	April 10, 2019	March 27, 2019	0.020	580
Total 2019			\$ 0.080	\$ 2,323

Share Repurchase Programs

On March 8, 2022, pursuant to a Board of Directors resolution, the Company announced its intention to repurchase an aggregate number of up to 1,000,000 shares of its common stock, par value \$0.10 per share, in the open market, over the succeeding one year at a price not to exceed \$20 per share, subject to limitations and restrictions under applicable securities laws.

On August 30, 2021, pursuant to a Board of Directors resolution, the Company announced its intention to repurchase an aggregate number of 300,000 shares of its common stock, par value \$0.10 per share, in the open market over the succeeding six months. During 2021, the Company purchased 300,000 shares of its common stock for a total of \$4,579 at an average price of \$15.26 per share.

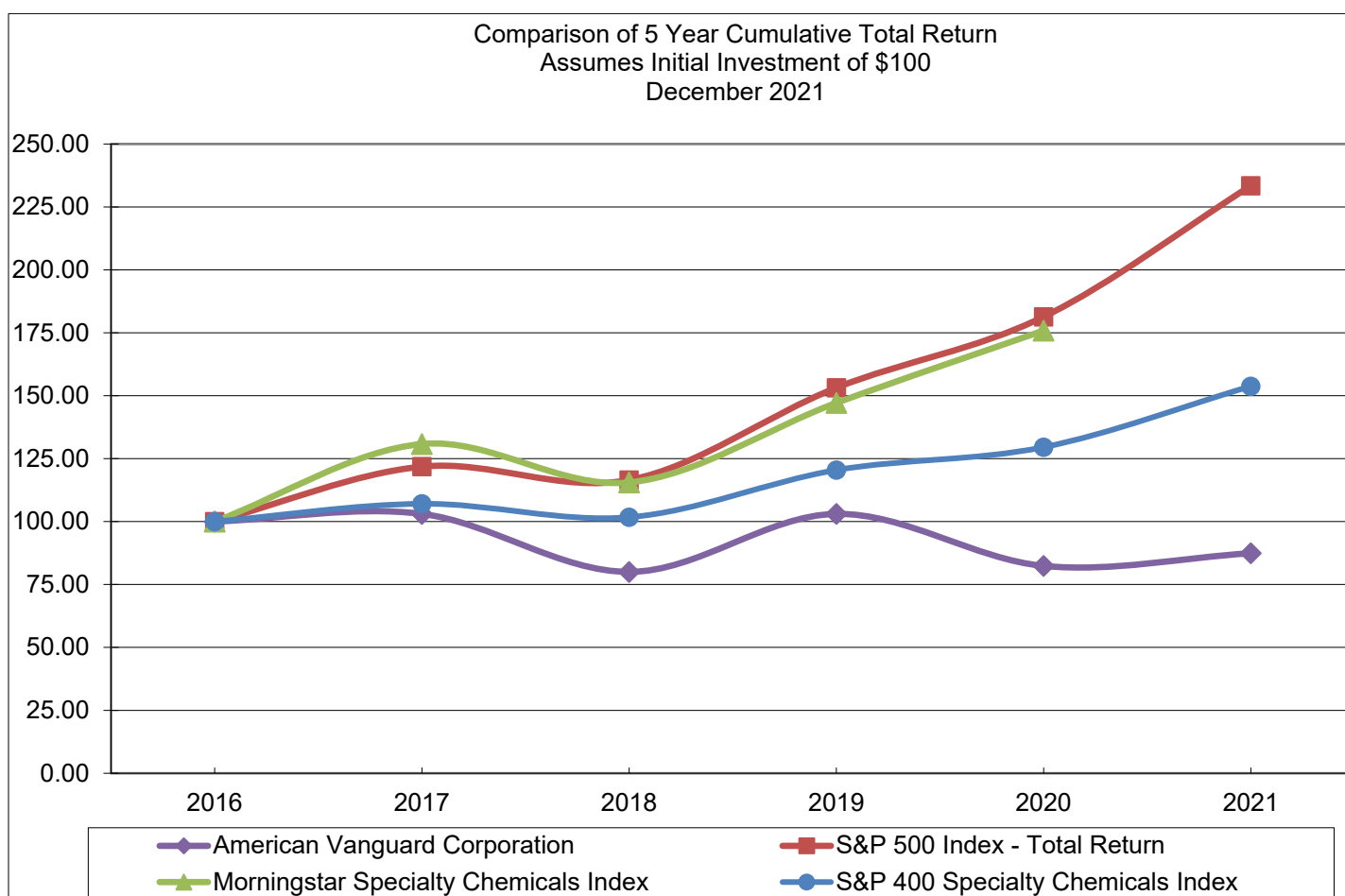
On November 5, 2018, pursuant to a Board of Directors resolution, the Company announced its intention to repurchase an aggregate number of shares with a total purchase price not to exceed \$20,000 of its common stock, par value \$0.10 per share, in the open market, at a price not to exceed \$17 per share, subject to limitations and restrictions under applicable securities laws. The Shares Repurchase Program expired on March 8, 2019. During 2019, the Company purchased 158,048 shares at an average price of \$16.48 per share, for a total of \$2,604. During 2018, the Company purchased 452,358 shares at an average price of \$16.11 per share, for a total of \$7,287.

Securities Authorized for Issuance under Equity Compensation Plans

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted average exercise price of outstanding options, warrants, rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved			
by security holders	222,694	\$ 11.49	870,345
Total	222,694	\$ 11.49	870,345

Stock Performance Graph

The following graph presents a comparison of the cumulative, five-year total return for the Company, the S&P 500 Stock Index, and a peer group (Specialty Chemical Industry). The graph assumes that the beginning values of the investments in the Company, the S&P 500 Stock Index, and the peer group of companies each was \$100 on December 31, 2016. All calculations assume reinvestment of dividends. Returns over the indicated period should not be considered indicative of future returns.



ITEM 6 RESERVED

ITEM 7 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FORWARD-LOOKING STATEMENTS/RISK FACTORS:

The Company, from time-to-time, may discuss forward-looking statements including assumptions concerning the Company's operations, future results and prospects. Generally, "may," "could," "will," "would," "expect," "believe," "estimate," "anticipate," "intend," "continue" and similar words identify forward-looking statements. Forward-looking statements appearing in this Report are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on our current expectations and are subject to risks and uncertainties that can cause actual results and events to differ materially from those set forth in or implied by the forward-looking statements and related assumptions contained in the entire Report. Such factors include, but are not limited to: product demand and market acceptance risks; the effect of economic conditions; weather conditions; changes in regulatory policy; the impact of competitive products and pricing; changes in foreign exchange rates; product development and commercialization difficulties; capacity and supply constraints or difficulties; availability of capital resources; general business regulations, including taxes and other risks as detailed from time-to-time in the Company's reports and filings filed with the U.S. Security and Exchange Commission ("SEC"). It is not possible to foresee or identify all such factors. We urge you to consider these factors carefully in evaluating the forward-looking statements contained in this Report.

The discussion and analysis of our financial condition and results of operations for 2021, as compared to 2020 appears below. As permitted by SEC rules, we have omitted the discussion and analysis of our financial condition and results of operations for 2020 compared to 2019. See Item 7, "Management's Discussions and Analysis of Financial Condition and Results of Operations", in our Annual Report on Form 10-K for the year ended December 31, 2020, for this discussion.

MANAGEMENT OVERVIEW

The Company's performance in 2021 was stronger in most all respects as compared to the prior year. The domestic agricultural economy continued an upcycle that started at the end of 2020 following several years in a downcycle. With that trend, commodity prices for many crops, including corn, soybeans and cotton, rose and remained strong. Both growers and the distribution channel, which had previously worked down inventory to very low levels, began to replenish their stocks of crop inputs. At the same time, pandemic restrictions were relieved in many regions and were only partially reinstated with the emergence at the end of 2021 of the Omicron variant of the coronavirus. Despite supply chain disruptions and some associated cost escalation, particularly on in-bound freight, and the year-end pandemic surge, the markets for the Company's products were more robust. Net sales for 2021 rose 21%, as compared to 2020 (\$556,872, as compared to \$458,704), and net income was up about 22% (\$18,587, as compared to \$15,242). It is also interesting to note that operating income rose 35% (to \$30,946 in 2021 from \$22,908 in 2020) and that, but for the one-time benefit in 2020 of \$4,657 arising from a bargain purchase gain relating to the Agrinos acquisition, the improvement in operating income would have been 65% year-over-year.

In summary, our results for 2021 were as follows. Net sales performance was improved across all our businesses. The top line of our U.S. Crop segment was up by 25%, led by strong demand for soil insecticides and cotton products. Sales of our U.S. Non-Crop business was up 30% due largely to strong demand for our mosquito adulticide product, as customers replenished channel inventory. International sales rose with the addition of businesses that had been acquired late in 2020 (Agrinos and AgNova), continued strong performance in Mexico and overall strong performance in other regions.

As a result of the sales dynamics just described, gross profit during 2021 was approximately 24% above that of 2020 (\$213,243 vs. \$172,590). Further, gross profit when expressed as a percentage of sales was 38%, which was in line with the prior year. Operating expenses increased by 18% ending at \$182,468, as compared to \$154,339 in 2020; however, operating expenses (which include outbound freight) as a percent of net sales decreased to 33% from 34% compared to 2020.

With a lower average debt level and a decrease in the effective interest rate, our interest expense dropped by about 29% (to \$3,687 in 2021 from \$5,178 in 2020) due to timing of our borrowings, continued strong cash generated from increased sales, customer prepayment programs and a reduction in effective interest rates. For 2021, we reported income before provision for income taxes and loss on equity method investment of \$27,141, as compared to \$18,447 in 2020. Despite a higher effective tax rate and income taxes, our net income was \$18,587 in 2021 as compared to \$15,242, which represents an increase of about 22%.

When considering the consolidated balance sheet, long-term debt decreased to \$52,240 as of December 31, 2021, from \$107,442 as of December 31, 2020. The decreased level of debt was driven by the Company's strong cash management during 2021, including a continued strong response from the Company's biggest customers to our early-pay programs. The Company's liquidity position improved with a closing borrowing availability of \$178,705 as of December 31, 2021, as compared to \$86,736 as of December 31, 2020. Furthermore, inventories decreased to \$154,306, as of December 31, 2021, as compared to inventories of \$163,784, as of December 31, 2020.

Results of Operations

2021 Compared with 2020:

	2021	2020	\$ Change	% Change
Net sales:				
U.S. crop	\$ 263,632	\$ 211,357	\$ 52,275	25%
U.S. non-crop	78,605	60,367	18,238	30%
Total U.S.	342,237	271,724	70,513	26%
International	214,635	186,980	27,655	15%
Total net sales	<u>\$ 556,872</u>	<u>\$ 458,704</u>	<u>\$ 98,168</u>	21%
Cost of sales:				
U.S. crop	\$ 154,064	\$ 118,634	\$ 35,430	30%
U.S. non-crop	41,162	32,525	8,637	27%
Total U.S.	195,226	151,159	44,067	29%
International	148,403	134,955	13,448	10%
Total cost of sales	<u>\$ 343,629</u>	<u>\$ 286,114</u>	<u>\$ 57,515</u>	20%
Gross profit:				
U.S. crop	\$ 109,568	\$ 92,723	\$ 16,845	18%
U.S. non-crop	37,443	27,842	9,601	34%
Total U.S.	147,011	120,565	26,446	22%
International	66,232	52,025	14,207	27%
Total gross profit	<u>\$ 213,243</u>	<u>\$ 172,590</u>	<u>\$ 40,653</u>	24%
Gross margin:				
U.S. crop	42%	44%		
U.S. non-crop	48%	46%		
Total U.S.	43%	44%		
International	31%	28%		
Total gross margin	38%	38%		

Net sales of our U.S. crop business were about 25% higher than those of the prior year (\$263,632 vs. \$211,357). Reopening of the economy, transportation needs fueling ethanol, and improving grower profitability due to higher crop commodity prices, all contributed to strong demand for AVD's crop protection products. Despite the second year of challenging COVID-19 pandemic conditions characterized by the Delta variant and, at the end of the year, the Omicron variant and supply chain disruptions, overall demand in the U.S. crop segment continued the steady improvement that had started with the 2019-2020 crop season, and our customers in the distribution channel gradually returned to more normal procurement practices. We had very strong performance in corn, with sales of soil insecticides and post-emergent herbicides posting a 45% year-over-year increase. Similarly in cotton, a strong commodity price stimulated demand for our foliar insecticides and harvest defoliant which generated sales that were up 84%, as compared to those of 2020. We also recorded stronger sales in our soybean products, Thimet for peanuts, and Dacthal for a wide range of fruits and vegetables. Partially offsetting these increases, sales of our soil fumigant business declined slightly due to year-end logistics difficulties in transporting this large volume liquid product, particularly in the Pacific Northwest region.

Cost of sales within the domestic crop business was higher in 2021 (up 30% to \$154,064 from \$118,634 in 2020), on sales that increased 25%, gross profit improved by 18% (\$109,568 in 2021 vs. \$92,723 in 2020), and gross margin was 42% of sales as compared to 44% last year.

Net sales of our U.S. non-crop business were up about 30% (\$78,605 in 2021 vs. \$60,367 in 2020) largely due to our Dibrom® mosquito adulticide sales, which nearly doubled in 2021, as demand from mosquito control distributors was driven by significant tropical storm and hurricane activity and the normal need to refill channel inventory in readiness for the next season. Net sales of pest strips and other commercial pest control products increased strongly in 2021, as restaurants, schools, malls, and many other commercial enterprises reopened with the lifting of pandemic restrictions. Net sales from our OHP nursery and ornamental business were 19% higher than 2020, as demand for homeowner garden and landscape products accelerated during the year at retail locations around the country. Finally, our TyraTech/Envance revenues grew over 71% driven by both direct product sales and royalty income which exceeded prior year performance.

Cost of sales in our U.S. non-crop business rose by 27% in comparison to the prior year (\$41,162 in 2021 vs. \$32,525 in 2020), gross profit increased by 34% (from \$27,842 in 2020 to \$37,443 in 2021), and gross margin percentage increased to 48% in 2021, as compared to 46% in 2020.

Net sales of our international businesses increased by 15% in 2021 (\$214,635 vs. \$186,980 in 2020). During 2021, our international group successfully integrated two important new businesses. Our AgNova acquisition more than doubled our existing business in Australia, while our Agrinos biological products expanded our footprint in more than a half dozen countries worldwide. We enjoyed strong demand for our soil fumigants and our bromacil herbicides, particularly in Mexico, and experienced steady sales of our Counter nematocide in Central America and Brazil. Further, we experienced slightly higher sales in our AgriCenter Central American distribution business, despite supply chain challenges, limited customer access (in light of coronavirus protocols), and competitive market conditions.

Cost of sales in our international business increased by 10% (to \$148,403 in 2021 from \$134,955 in 2020), on sales that increased 15%, gross profit rose 27% from the prior year (to \$66,232 in 2021 vs. \$52,025 in 2020), and gross margin improved to 31%, as compared to 28% reported in 2020.

On a consolidated basis, gross profit for the year increased by 24% (ending at \$213,243 in 2021, as compared to \$172,590 in 2020) on sales up 21%. Total gross margin percentage remained the same as prior year at 38%.

Operating expenses (which include outbound freight costs) increased by \$28,129 in 2021, to \$182,468 or 33% of sales, as compared to \$154,339 or 34% in 2020. The differences in operating expenses by department are as follows:

	2021	2020	Change	% Change
Selling	\$ 48,604	\$ 42,389	\$ 6,215	15%
General and administrative	61,685	48,828	12,857	26%
Research, product development and regulatory	28,855	26,310	2,545	10%
Freight, delivery and warehousing	43,324	36,812	6,512	18%
Total Operating Expenses	\$ 182,468	\$ 154,339	\$ 28,129	18%

- Selling expenses increased by 15% to \$48,604 for the year ended December 31, 2021, as compared to \$42,389 in 2020. The main drivers were the costs associated with the activities from the businesses acquired in the last quarter of 2020, increased labor costs related to inflation plus some key staff additions and, increases in travel and entertainment expenses as pandemic restrictions eased in most territories in which we operate.
- General and administrative expenses increased by 26% to \$61,685 for the year ended December 31, 2021, as compared to \$48,828 in 2020. The main drivers were the costs in the amount of \$1,833 associated with the addition of the entities acquired in the final quarter of 2020, the increase in short-term and long-term incentive compensation of \$3,110, as a result of improved financial performance, additional legal expenses of \$2,151 largely arising from the Department of Justice investigation, increased bad debt expenses of \$649 related to our businesses in Central America, and adverse foreign exchange costs associated with our businesses in Central and South America. Finally, the Australian business we acquired in the final quarter of 2020 has performed above expectations and as a result we recorded an expense of \$758 related to the increase to the fair value of the associated contingent consideration.
- Research, product development and regulatory expenses increased by 10% to \$28,855 in 2021, as compared to \$26,310 in 2020. The main drivers were increases in our product development costs, primarily resulting from increased activities in our newly acquired businesses and work in support of our SIMPAS/ULTIMUS technology platform.
- Freight, delivery and warehousing costs for the year ended December 31, 2021, increased by 18% (on sales up 21%) to \$43,324, as compared to \$36,812 in 2020. This is mainly due to volume increases, product mix and locations of customers. When expressed as a percentage of sales, freight costs decreased slightly year over year to 7.8% in 2021, as compared to 8.0% in 2020. This was achieved despite the global inflation being seen in freight costs.

In July 2020, the Company made a strategic investment in Clean Seed Inc., in the amount of \$1,190. Subsequent to the initial investment, the Company recorded a loss to its fair value in the amount of \$391 in 2021 and gain in the amount of \$717 in 2020, respectively.

In February 2016, AMVAC BV made an equity investment of \$3,283 in Biological Products for Agriculture (“Bi-PA”). The Company has elected to measure the investment at cost less impairment, if any, and to record an increase or decrease for changes resulting from observable price changes in orderly transactions for the identical or a similar investment of Bi-PA. The Company recorded an impairment in the amount of \$399 during the year ended December 31, 2021. No impairment was recorded for the year ended December 31, 2020.

Net interest expense was \$3,687 in 2021, as compared to \$5,178 in 2020. Interest costs are summarized in the following table:

Average Indebtedness and Interest expense	2021			2020		
	Average Debt	Interest Expense	Interest Rate	Average Debt	Interest Expense	Interest Rate
Working capital revolver	\$142,238	\$ 3,414	2.4%	\$170,801	\$ 5,158	3.0%
Interest income	—	(65)	—	—	(89)	—
Amortization of deferred loan fees	—	367	—	—	300	—
Amortization of other deferred liabilities	—	(4)	—	—	23	—
Other interest expense	—	218	—	—	110	—
Subtotal	142,238	3,930	2.8%	170,801	5,502	3.2%
Capitalized interest	—	(243)	—	—	(324)	—
Total	<u>\$142,238</u>	<u>\$ 3,687</u>	<u>2.6%</u>	<u>\$170,801</u>	<u>\$ 5,178</u>	<u>3.0%</u>

The Company's average debt for the year ended December 31, 2021, was \$142,238, as compared to \$170,801 for the year ended December 31, 2020. On a gross basis, after adjustments related to capitalized interest and expenses related to the amortization of deferred liabilities, our effective interest rate on our working capital revolver decreased to 2.6%, as compared to 3.0% in 2020. This improvement was driven by U.S. fiscal policy and decreases in the LIBOR rate, and improved cash management.

Our provision for income taxes for 2021 was \$8,166, as compared to \$3,080 for 2020. The effective tax rate for 2021 was 30.0%, as compared to 16.7% in 2020. The increase of the effective tax rate in 2021 was due to a non-cash charge related to a valuation allowance associated with a deferred tax asset in Brazil.

The Company is subject to U.S. federal income tax as well as to income tax in multiple state jurisdictions. Federal income tax returns of the Company are subject to Internal Revenue Service ("IRS") examination for the 2018 through 2020 tax years. State income tax returns are subject to examination for the 2017 through 2020 tax years. The Company has other foreign income tax returns subject to examination.

For the years ended December 31, 2021 and 2020, the Company recorded net losses on its equity investments of \$388 and \$125, respectively.

Net income was \$18,587 or \$0.62 per basic share and \$0.61 per diluted share in 2021 as compared to \$15,242 or \$0.52 per basic share and \$0.51 per diluted share in 2020.

Liquidity and Capital Resources

The Company generated \$86,361 of cash from operating activities during the year ended December 31, 2021, as compared to \$90,324 in the prior year. Included in the \$86,361 are net income of \$18,587, plus non-cash depreciation, amortization of intangibles and other assets and discounted future liabilities, in the amount of \$26,164, loss on disposal of property, plant and equipment of \$194, amortization of deferred loan fees of \$367, revision of contingent consideration of \$758, and provision for bad debts in the amount of \$649. In addition, stock-based compensation of \$6,880, loss from equity method investments of \$388, change in fair value of investments of \$790, change in value of deferred income taxes of \$2,090, change in reserves for uncertain tax positions of \$1,783, adjustment to bargain purchase gain on business acquisition in the amount of \$171, decrease in environmental liability of \$167, and net foreign currency adjustment of \$225, resulted in net cash provided by operating activities of \$49,669, as compared to \$39,931 for the same period of 2020.

During 2021, the Company decreased working capital by \$39,987, as compared to the position at December 31, 2020. Included in this change: accounts receivables net increased by \$24,347, inventories decreased by \$8,130, tax receivable, net increased by \$6,051, and prepaid expenses increased by \$3,354. Deferred revenue increased by \$19,280, as compared to December 31, 2020, driven by individual customer decisions to make early payments in return for early cash incentive programs. Our accounts payable balances increased by \$8,783, program accruals increased by \$17,877 and other payables and accrued expenses increased by \$3,986.

With regard to our program accrual, the year-over-year change is primarily driven by the mix of sales and customers in 2021, as compared to the prior year. The Company accrues programs in line with the growing season upon which specific products are targeted. Most of our programs relate to domestic sales. Typically, domestic crops have a growing season that ends on September 30th of each year. During 2021, the Company made accruals in the amount of \$99,482 and made payments in the amount of \$81,678. During 2020, the Company made accruals in the amount of \$66,622 and made payments in the amount of \$68,880.

Because the estimate for the program accrual is a material component of the presentation of the Company’s overall financial performance, the Company believes that the process it uses is critical in setting the accrual at the appropriate level. The Company’s process for developing the estimate involves a detailed review of each related transaction and includes the input of a significant number of senior employees to enable the Company to set the accrual using consistently applied judgements, subject to the particular circumstances of any individual transaction.

Cash used for investing activities amounted to \$20,042 for the year ended December 31, 2021, as compared to \$35,795 in 2020. In 2021, the Company spent \$10,524 in business and product acquisitions and on patents applications associated with its TyraTech and Envance technology solutions. In addition, in 2021, \$9,518 was spent on capital expenditures primarily focused on continuing to invest in manufacturing infrastructure to expand production efficiency and capabilities. In 2020, the Company spent \$23,356 in business and product acquisitions including intangible assets, goodwill, working capital and fixed assets as well as patent application costs, and \$11,249 on capital expenditures primarily focused on our manufacturing facilities. Furthermore in 2020, the Company spent \$1,190 on an equity investment.

During the year ended December 31, 2021, financing activities used \$65,871, as compared to \$44,440 during the prior year. This included making repayments on the Company’s senior credit facility in the amount of \$55,569 during the year ended December 31, 2021. During 2020, the Company made similar repayments in the amount of \$41,624. During 2021, the Company paid dividends to stockholders amounting to \$2,382, as compared to \$1,168 in 2020. Furthermore, the Company paid for contingent consideration in the amount of \$1,301 and \$1,227 for the years ended December 31, 2021 and 2020, respectively. Finally, the Company used \$4,579 to repurchase common stock in 2021. The Company did not repurchase stock in 2020.

The Company has various loans in place that together constitute the long-term loan balances shown in the consolidated balance sheets as of December 31, 2021 and 2020. These are summarized in the following table:

Indebtedness	2021	2020
Revolving line of credit	\$ 53,300	\$ 107,900
Debt issuance costs	(1,060)	(458)
Total indebtedness	<u>\$ 52,240</u>	<u>\$ 107,442</u>

The Company’s main bank is Bank of the West, a wholly owned subsidiary of the French bank, BNP Paribas. Bank of the West has been the Company’s bank for more than 30 years and is the syndication manager for the Company’s loans.

The Company and certain of its affiliates are parties to a revolving line of credit agreement entitled the “Third Amended and Restated Loan and Security Agreement” dated as of August 5, 2021 (the “Credit Agreement”), which is a senior secured lending facility among AMVAC, the Company’s principal operating subsidiary, as Borrower Agent (including the Company and AMVAC BV), as Borrowers, on the one hand, and a group of commercial lenders led by Bank of the West as administrative agent, documentation agent, syndication agent, collateral agent, sole lead arranger and book runner, on the other hand. The Credit Agreement consists of a line of credit of up to \$275,000, an accordion feature of up to \$150,000, a letter of credit and swingline sub-facility (each having limits of \$25,000) and has a maturity date of August 5, 2026. The Credit Agreement amends and restates the previous credit facility, which had a maturity date of June 30, 2022. With respect to key financial covenants, the Credit Agreement contains two: namely, borrowers are required to maintain a Total Leverage (“TL”) Ratio of no more than 3.5-to-1, during the first three years, stepping down to 3.25-to-1 as of September 30, 2024, and a Fixed Charge Coverage Ratio of at least 1.25-to-1. In addition, to the extent that it completes acquisitions totaling \$15 million or more in any 90-day period, AMVAC may step-up the TL Ratio by 0.5-to-1, not to exceed 4.00-to-1, for the next three full consecutive quarters. Acquisitions below \$50 million do not require Agent consent.

The Company’s borrowing capacity varies with its financial performance, measured in terms of Consolidated EBITDA as defined in the Credit Agreement, for the trailing twelve-month period. Under the Credit Agreement, revolving loans bear interest at a variable rate based, at borrower’s election with proper notice, on either (i) LIBOR plus the “Applicable Margin” which is based upon the Total Leverage (“TL”) Ratio (“LIBOR Revolver Loan”) or (ii) the greater of (x) the Prime Rate, (y) the Federal Funds Rate plus 0.5%, and (z) the Daily One-Month LIBOR Rate plus 1.00%, plus, in the case of (x), (y) or (z) the Applicable Margin (“Adjusted Base Rate Revolver Loan”). Interest payments for LIBOR Revolver Loans are payable on the last day of each interest period (either one-, three- or six- months, as selected by the borrower) and the maturity date, while interest payments for Adjusted Base Rate Revolver Loans are payable on the last business day of each month and the maturity date. The interest rate on December 31, 2021, was 1.98%.

At December 31, 2021, according to the terms of the Credit Agreement, as amended, and based on our performance against the most restrictive covenant listed above, the Company had the capacity to increase its borrowings by up to \$178,705. This compares to an available borrowing capacity of \$86,736 as of December 31, 2020. The level of borrowing capacity is driven by three factors: (1) our financial performance, as measured in EBITDA for trailing twelve-month period, (2) the inclusion of proforma EBITDA related to acquisitions completed during the preceding twelve months and (3) the leverage covenant (being the number of times EBITDA the Company may borrow under its credit facility agreement). The Company was in compliance with its debt covenants as of December 31, 2021.

We believe that the combination of our cash flows from future operations, current cash on hand and the availability under the Company's credit facility will be sufficient to meet our working capital and capital expenditure requirements and will provide us with adequate liquidity to meet our anticipated operating needs for at least the next 12 months from the issuance of the Annual Report. Although operating activities are expected to provide cash, to the extent of growth in the future, our operating and investing activities will use cash and, consequently, this growth may require us to access some or all of the availability under the credit facility. It is also possible that additional sources of finance may be necessary to support additional growth.

Substantially all the Company's assets are pledged as collateral under the Credit Agreement, as amended.

Recently Issued Accounting Guidance

Please refer to Note 3 of the Notes to the Consolidated Financial Statements in Part II, Item 8 of this Annual Report for recently issued and adopted accounting standards.

Foreign Exchange

The Company faces market risk to the extent that changes in foreign currency exchange rates affect our non-U.S. dollar functional currency for some of our foreign subsidiaries' revenues, expenses, assets and liabilities. We currently do not engage in hedging activities with respect to such exchange rate risks.

Assets and liabilities outside the U.S. are located in regions where we have subsidiaries or joint ventures: Central America, South America, North America, Europe, Asia, and Australia. Our investments in foreign subsidiaries and joint ventures with a functional currency other than the U.S. dollar are generally considered long-term. Accordingly, we do not hedge these net investments.

Inflation

Management believes inflation has had minimal impact on the Company's operations during the past two years. The Company is working diligently with its critical raw material suppliers to control inflationary pressures, conducting contract negotiations with focus on the following: reducing or delaying price increases due to higher environmental costs from suppliers mainly in China and India, managing the tariff impacts by sourcing and leveraging alternate geographies where possible, and lastly, monitoring strengths of the U.S. dollar vs other currencies in order to secure benefits and balance tariff effects. The Company recognizes there is long-term pressure on demand for raw materials in the developing world and is utilizing its expertise to minimize inflationary pressure. The Company has been able to push back on many of the proposed price increases for actives and intermediates that are shipped to our U.S. factories, to either avoid, minimize or forestall them. In response to inflation and other factors that have increased the cost of goods and services, the Company has successfully implemented price increases on its products.

CRITICAL ACCOUNTING POLICIES

Certain of the Company's policies require the application of judgment by management in selecting the appropriate assumptions for calculating financial estimates. These judgments are based on historical experience, terms of existing contracts, commonly accepted industry practices and other assumptions that the Company believes are reasonable under the circumstances. These estimates and assumptions are reviewed periodically, and the effects of revisions are reflected in the consolidated financial statements in the period that revisions are determined to be necessary. Actual results may differ from these estimates under different outcomes or conditions.

The Company's critical accounting policies and estimates include:

Principles of Consolidation—The Company's consolidated financial statements include the accounts of the Company and its subsidiaries. Less than wholly owned subsidiaries, including joint ventures, are consolidated when it is determined that the Company has a controlling financial interest, which is generally determined when the Company holds a majority voting interest. When protective rights, substantive rights or other factors exist, further analysis is performed in order to determine whether or not there is a controlling financial interest. The consolidated financial statements reflect the assets, liabilities, revenues and expenses of consolidated subsidiaries and the non-controlling parties' ownership share is presented as a non-controlling interest. All significant intercompany accounts and transactions are eliminated.

Revenue Recognition — Revenues from sales are recognized at the time control is transferred to the customer. This is typically the case when the customer has made the fixed commitment to purchase the goods, the products are shipped per the customer's instructions, the sales price can be identified, and collection is probable. The Company has adopted procedures to ensure that revenues are recognized when earned. The procedures are subject to management's review and from time-to-time certain revenues are excluded until it is clear that the title has passed and there is no further recourse to the Company. We also have some arrangements whereby revenues are recognized over time for certain products that are deemed to have no alternative use accompanied by an enforceable right to payment for performance completed to date. From time-to-time, the Company may offer a program to eligible customers, in good standing, that provides extended payment terms on a portion of the sales on selected products. The Company analyzes these extended payment programs in connection with its revenue recognition policy to ensure all revenue recognition criteria are satisfied at the time of sale. The Company also earns royalty income from its licensing arrangements which qualify as functional licenses rather than symbolic licenses. Upon signing a new licensing agreement, we typically receive up-front fees, which are generally characterized as non-refundable royalties. These fees are recognized as revenue upon the execution of the license agreements. Minimum royalty fees are recognized once the Company has an enforceable right for payment. Sales-based royalty fees are typically recognized when the sales occur. We calculate and accrue estimated royalties based on the agreement terms and correspondence with the licensees regarding actual sales. Allowance for doubtful accounts is established based on estimates of losses related to customer receivable balances. Estimates are developed using either standard quantitative measures based on historical losses, adjusted for current economic conditions, or by evaluating specific customer accounts for risk of loss.

Allowance for Doubtful Accounts or Current Expected Credit Losses —The Company maintains an allowance to cover its Current Expected Credit Losses ("CECL") on its trade receivables, other receivables and contract assets arising from the failure of customers to make contractual payments. The Company estimates credit losses expected over the life of its trade receivables, other receivables and contract assets based on historical information combined with current conditions that may affect a customer's ability to pay and reasonable and supportable forecasts. In most instances, the Company's policy is to write-off trade receivables when they are deemed uncollectible. The vast majority of the Company's trade receivables, other receivables and contract assets are less than 365 days. Under the CECL impairment model, the Company develops and documents its allowance for credit losses on its trade receivables based on multiple portfolios. The determination of portfolios is based primarily on geographical location, type of customer and aging.

Deferred Revenue - From time to time, the Company receives pre-payments from customers which are recorded as deferred revenue on the Company's consolidated balance sheets. The Company does not recognize revenue on any such payments unless and until the customer places binding purchase orders, the goods are shipped, and control is transferred to the customer.

Accrued Program Costs— The Company offers various discounts to customers based on the volume purchased within a defined period, other pricing adjustments, some grower volume incentives or other key performance indicator driven payments made to distributors, retailers or growers, usually at the end of a growing season. The Company describes these payments as "Programs." Programs are a critical part of doing business in both the U.S. crop and non-crop chemicals marketplaces. These discount Programs represent variable consideration. Revenues from sales are recorded at the net sales price, which is the transaction price, and includes estimates of variable consideration. Variable consideration includes amounts expected to be paid to its customers using the expected value method. Each quarter management compares individual sale transactions with Programs to determine what, if any, estimated program liabilities have been incurred. Once this initial calculation is made for the specific quarter, sales and marketing management, along with executive and financial management, review the accumulated Program balance and, for volume driven payments, make assessments of whether or not customers are tracking in a manner that indicates that they will meet the requirements set out in agreed upon terms and conditions attached to each Program. Following this assessment, management will make adjustments to the accumulated accrual to properly reflect the Company's best estimate of the liability at the balance sheet date. Programs are paid out predominantly on an annual basis, usually in the final quarter of the financial year or the first quarter of the following year.

Inventories — The Company values its inventories at lower of cost or net realizable value. Cost is determined by the first-in, first-out ("FIFO") or average cost method, including, as appropriate, raw materials, labor, factory overhead and subcontracting services. The Company writes down its inventory to the net realizable value following assessments of slow moving and obsolete inventory and other annual adjustments to ensure that our standard costs continue to closely reflect actual manufacturing cost.

Property, Plant and Equipment and Depreciation— Property, plant and equipment includes the cost of land, buildings, machinery and equipment, office furniture and fixtures, automobiles, construction projects and significant improvements to existing plant and equipment. Interest costs related to significant construction projects are capitalized at the Company's current weighted average effective interest rate. Expenditures for minor repairs and maintenance are expensed as incurred. When property or equipment is sold or otherwise disposed of, the related cost and accumulated depreciation are removed from the respective accounts and the gain or loss realized on disposition is reflected in earnings. All plant and equipment assets are depreciated using the straight-line method, utilizing the estimated useful property lives. Once placed into service, building lives range from 10 to 30 years; machinery and equipment lives range from 3 to 15 years.

Leases—The Company has operating leases for warehouses, manufacturing facilities, offices, cars, railcars and certain equipment. The Company recognizes operating lease right-of-use (ROU) assets and lease liabilities for all leases. The Company measures ROU assets throughout the lease term at the carrying amount of the lease liability, plus initial direct costs, plus (minus) any prepaid (accrued) lease payments, less the unamortized balance of lease incentives received. The lease liabilities are measured at the present value of the unpaid lease payments at the lease commencement date. Leases that include both lease and non-lease components are accounted for as a single lease component for each asset class, except for warehouses. The minimum payments under operating leases are recognized on a straight-line basis over the lease term in the consolidated statements of operations. Operating lease expenses related to variable lease payments are recognized in cost of sales or as operating expenses in a manner consistent with the nature of the underlying lease and as the events, activities, or circumstances in the lease agreement occur. Leases with a term of less than 12 months are not recognized on the consolidated balance sheets, and the related lease expenses are recognized in the consolidated statements of operations on a straight-line basis over the lease term. The accounting for leases requires management to exercise judgment and make estimates in determining the applicable discount rate, lease term and payments due under a lease. Most of our leases do not provide an implicit interest rate, nor is it available to us from our lessors. As an alternative, we use our estimated incremental borrowing rate, which is derived from information available at the lease commencement date, including publicly available data, in determining the present value of lease payments. We also estimated the fair value of the lease and non-lease components for some of our warehouse leases based on market data and cost data. The lease term includes the non-cancellable period of the lease plus any additional periods covered by either an option to extend (or not terminate) that the Company is reasonably certain to exercise. The Company has leases with a lease term ranging from 1 year to 20 years. The operating leases of the Company do not contain major restrictions or covenants such as those relating to dividends or additional financial obligations. Finance leases are immaterial to the consolidated financial statements.

Intangible Assets—The primary identifiable intangible assets of the Company relate to assets associated with its product and business acquisitions. All of the Company's intangible assets have finite lives and are amortized. The estimated useful life of an identifiable intangible asset is based upon a number of factors including the effects of demand, competition, and expected changes in the marketability of the Company's products.

Business Combinations—The Company uses its best estimates and assumptions to assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date. The Company's estimates are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the fair value of these tangible and intangible assets acquired and liabilities assumed, with the corresponding offset to goodwill or an adjustment to the gain from a bargain purchase. In addition, uncertain tax positions and tax-related valuation allowances are initially recorded in connection with a business combination as of the acquisition date. The Company continues to collect information and reevaluates these estimates and assumptions quarterly and records any adjustments to the Company's preliminary estimates to goodwill provided that the Company is within the measurement period. Upon the conclusion of the measurement period or final determination of the fair value of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the Company's consolidated statement of operations.

Certain of our acquisition agreements include contingent earn-out arrangements, which are generally based on the achievement of future income thresholds. The fair values of these earn-out arrangements are included as part of the purchase price of the acquired companies on their respective acquisition dates. For each transaction, we estimate the fair value of contingent earn-out payments as part of the initial purchase price and record the estimated fair value of contingent consideration as a liability on the consolidated balance sheets.

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis until the contingent period ends, and the updated fair value could be materially different from the initial estimates or prior quarterly amounts. Changes in the estimated fair value of our contingent earn-out liabilities are reported in operating results.

Asset Acquisitions—If an acquisition of an asset or group of assets does not meet the definition of a business, the transaction is accounted for as an asset acquisition rather than a business combination. An asset acquisition does not result in the recognition of goodwill and transaction costs are capitalized as part of the cost of the asset or group of assets acquired. The Company uses its best estimates and assumptions to assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date. The acquisitions costs are allocated to the assets acquired on a relative fair value basis. Certain of our acquisition agreements include contingent earn-out arrangements, which are recognized only when the contingency is resolved, and the consideration is paid or becomes payable.

Impairment—The carrying values of long-lived assets other than goodwill are reviewed for impairment annually and/or whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. The Company evaluates recoverability of an asset group by comparing the carrying value to the future undiscounted cash flows that it expects to generate from the asset group. If the comparison indicates that the carrying value of an asset group is not recoverable, measurement of the impairment loss is based on the fair value of the asset.

The Company reviews goodwill for impairment utilizing either a qualitative or quantitative assessment. If the Company decides that it is appropriate to perform a qualitative assessment and concludes that the fair value of a reporting unit more likely than not exceeds its carrying value, no further evaluation is necessary. If the Company performs a quantitative assessment, the Company compares the fair value of a reporting unit with its carrying values and recognizes an impairment charge for the amount that the carrying amount exceeds the reporting unit's fair value. The Company annually tests goodwill for impairment at the beginning of the fourth quarter, or earlier if triggering events occur.

Fair Value of Financial Instruments—The accounting standard for fair value measurements provides a framework for measuring fair value and requires expanded disclosures regarding fair value measurements. Fair value is defined as the price that would be received for an asset or the exit price that would be paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. This accounting standard established a fair value hierarchy, which requires an entity to maximize the use of observable inputs, where available. The following summarizes the three levels of inputs required:

- Level 1 – Quoted prices in active markets for identical assets or liabilities.
- Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 – Inputs that are generally unobservable and typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability.

The carrying amount of the Company's financial instruments, which principally include cash and cash equivalents, short-term investments, accounts receivable, long-term investments, accounts payable and accrued expenses approximate fair value because of the relatively short maturity of such instruments. The carrying amount of the Company's short-term and long-term borrowings, which are considered Level 2 liabilities, approximates fair value based upon current rates and terms available to the Company for similar debt.

We measure our contingent earn-out liabilities in connection with acquisitions at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy. We may use various valuation techniques depending on the terms and conditions of the contingent consideration including a Monte-Carlo simulation. This simulation uses probability distribution for each significant input to produce hundreds or thousands of possible outcomes and the results are analyzed to determine probabilities of different outcomes occurring.

Foreign Currency Translation—Certain international operations use the respective local currencies as their functional currency, while other international operations use the U.S. Dollar as their functional currency. The Company considers the U.S. Dollar as its reporting currency. Translation adjustments for subsidiaries where the functional currency is its local currency are included in other comprehensive income (loss). Foreign currency transaction gains (losses) resulting from exchange rate fluctuation on transactions denominated in a currency other than the functional currency are reported in earnings. Assets and liabilities of the foreign operations denominated in local currencies are translated at the rate of exchange at the balance sheet date. Revenues and expenses are translated at the weighted average rate of exchange during the period. Translations of intercompany loans of a long-term investment nature are included as a component of translation adjustment in other comprehensive income (loss).

Income taxes—Income tax expense, deferred tax assets and liabilities, and liabilities for unrecognized tax benefits reflect management’s best estimate of current and future taxes to be paid. The Company is subject to income taxes in the U.S. and several foreign jurisdictions. The Company assessed the ability to realize deferred tax assets and determined that based on the available evidence, including a history of taxable income and estimates of future taxable income, it is more likely than not that the net deferred tax assets relating to the Company’s operations in Brazil will not be realized and a full valuation allowance was recorded in that jurisdiction. Significant management judgment is required in determining the provision for income taxes and deferred tax assets and liabilities. In the event that actual results differ from these estimates, we will adjust these estimates in future periods, which may result in a change in the effective tax rate in a future period. Accounting for income taxes involves uncertainty and judgment on how to interpret and apply tax laws and regulations within the Company’s annual tax filings. Such uncertainties from time to time may result in a tax position that may be challenged and overturned by a tax authority in the future, which could result in additional tax liability, interest charges and possibly penalties. The Company classifies interest and penalties as a component of income tax expense.

ITEM 7A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to market risk related to changes in interest rates, primarily from its borrowing activities. The Company’s indebtedness to its primary group of lenders is evidenced by a line of credit with a variable rate of interest, which fluctuates with changes in the lender’s reference rate (LIBOR). The Company may use derivative financial instruments for trading purposes to protect trading performance from exchange rate fluctuations on material contracts, though there are no such instruments in place during any periods presented in this Annual Report.

The Company conducts business in various foreign currencies, primarily when doing business in Europe, Mexico, Central and South America. Therefore, changes in the value of the currencies of such countries or regions affect the Company’s financial position and cash flows when translated into U.S. Dollars. The Company has mitigated, and will continue to mitigate, a portion of its currency exchange exposure through natural hedges based on the operation of decentralized foreign operating companies in which the majority of all costs are local-currency-based. A 10% change in the value of all foreign currencies would have an immaterial effect on the Company’s financial position and cash flows. As part of an on-going process of assessing business risk, management has identified risk factors which are disclosed in Item 1A. Risk Factors of this Report on Form 10-K.

ITEM 8 FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The Financial Statements and Supplementary Data required by this item are listed at Part IV, Item 15, Exhibits, and Financial Statement Schedules.

ITEM 9 CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Management, under the supervision of the Company’s Chief Executive Officer and Chief Financial Officer, periodically evaluate the effectiveness of the design and operation of the Company’s disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)). Based upon this evaluation, as of December 31, 2021, the Chief Executive Officer and the Chief Financial Officer have concluded that these disclosure controls and procedures are effective in ensuring that the information required to be disclosed in reports filed under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported on a timely basis, and (ii) accumulated and communicated to the Company’s management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management’s Report on Internal Control over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934 for the Company. The Company’s internal control system over financial reporting is designed to provide reasonable assurance to management and the Board of Directors as to the fair, reliable and timely preparation and presentation of consolidated financial statements in accordance with accounting principles generally accepted in the United States of America filed with the SEC.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even processes determined to be effective can provide only reasonable assurance with respect to the financial statement preparation and presentation.

Management conducted an evaluation of the Company's internal controls over financial reporting based on a framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework (2013)*. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the effectiveness of controls and a conclusion on the evaluation. Based on this evaluation, management believes that as of December 31, 2021, the Company's internal control over financial reporting is effective.

BDO USA, LLP, the independent registered public accounting firm that audited the consolidated financial statements included in the Annual Report on Form 10-K, was engaged to attest to and report on the effectiveness of AVD's internal control over financial reporting as of December 31, 2021. Its report is included herein.

Changes in Internal Controls over Financial Reporting

There were no changes in internal controls over financial reporting during the fourth quarter of the year ended December 31, 2021, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

Stockholders and Board of Directors
American Vanguard Corporation
Newport Beach, California

Opinion on Internal Control over Financial Reporting

We have audited American Vanguard Corporation's (the "Company's") internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of operations and comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and financial statement schedule listed in the accompanying index and our report dated March 11, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of internal control over financial reporting in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit 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 audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

/s/ BDO USA, LLP

Costa Mesa, California
March 11, 2022

**AMERICAN VANGUARD CORPORATION
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ITEM 9B OTHER INFORMATION

None.

ITEM 9C DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

PART III

ITEM 10 DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information set forth under the captions “Executive Officers of the Company,” “Election of Directors,” “Information about the Board of Directors and Committees of the Board” and “Transactions with Management and Others—Section 16(a) Beneficial Ownership Reporting Compliance” in our definitive proxy statement (the “Proxy Statement”) for our Annual Meeting of Stockholders to be held on June 1, 2022, which will be filed with the SEC within 120 days of the end of our fiscal year ended December 31, 2021, is incorporated herein by reference.

ITEM 11 EXECUTIVE COMPENSATION

Except as specifically provided, the information set forth under the captions “Compensation of Executive Officers” and “Information about the Board of Directors and Committees of the Board—Compensation of Directors” in the Proxy Statement is incorporated herein by reference.

ITEM 12 SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The disclosure contained in Part II, Item 5 under “Equity Compensation Plan Information” is incorporated herein by reference. Information regarding security ownership of certain beneficial owners and management is incorporated by reference to the information set forth under the caption “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement.

ITEM 13 CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information set forth under the captions “Transactions with Management and Others” and “Information about the Board of Directors and Committees of the Board” in the Proxy Statement is incorporated herein by reference.

ITEM 14 PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information regarding principal accountant fees and services is incorporated herein by reference to the information set forth under the caption “Ratification of the Selection of Independent Registered Public Accounting Firm—Relationship of the Company with Independent Registered Public Accounting Firm” in the Proxy Statement.

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

PART IV

ITEM 15 EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

(a) The following documents are filed as part of this report:

Index to Consolidated Financial Statements and Supplementary Data:

<u>Description</u>	<u>Page No</u>
Financial Statement Schedule:	
Schedule II_A Valuation and Qualifying Accounts	35
Financial Statements:	
Report of Independent Registered Public Accounting Firm BDO USA, LLP; Costa Mesa, California, PCAOB ID#243	37
Consolidated Balance Sheets as of December 31, 2021 and 2020	39
Consolidated Statements of Operations for the Years Ended December 31, 2021, 2020 and 2019	40
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2021, 2020 and 2019	41
Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2021, 2020 and 2019	42
Consolidated Statements of Cash Flows for the Years Ended December 31, 2021, 2020 and 2019	43
Notes to Consolidated Financial Statements	44

(b) Exhibits Index

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

EXHIBIT INDEX

ITEM 15

Exhibit Number	Description of Exhibit
3.1	Amended and Restated Certificate of Incorporation of American Vanguard Corporation (filed as Exhibit 3.1 to the Company's Form 10-K for the year ended December 31, 2003, which was filed on March 30, 2004, with the Securities Exchange Commission and incorporated herein by reference).
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation of American Vanguard Corporation (filed as Exhibit 3.2 to the Company's Form 10-Q/A for the period ended June 30, 2004, which was filed with the Securities Exchange Commission on February 23, 2005, and incorporated herein by reference).
3.3	Amended and Restated Bylaws of American Vanguard Corporation dated as of June 5, 2014 (filed as Exhibit 99.1 to the Company's Form 8-K, which was filed with the Securities Exchange Commission on June 7, 2014, and incorporated herein by reference.)
4	Form of Indenture (filed as Exhibit 4.4 to the Company's Registration Statement on Form S-3 (File No. 333-122981) and incorporated herein by reference).
10.1	American Vanguard Corporation Employee Stock Purchase Plan (filed as Appendix A to the Company's Proxy Statement filed with the Securities and Exchange Commission on April 23, 2018, and incorporated herein by reference).
10.2	American Vanguard Corporation Amended and Restated Stock Incentive Plan as of June 8, 2016 (filed as Appendix A to the Company's Proxy Statement filed with the Securities and Exchange Commission on April 25, 2016, and incorporated herein by reference).
10.3	Form of Incentive Stock Option Agreement under the American Vanguard Corporation Fourth Amended and Restated Stock Incentive Plan , (filed as Exhibit 10.3 with the Company's Annual Report on Form 10-K for the period ended December 31, 2004, which was filed with the Securities and Exchange Commission on March 16, 2005, and incorporated herein by reference).
10.4	Form of Non-Qualified Stock Option Agreement under the American Vanguard Corporation Fourth Amended and Restated Stock Incentive Plan , (filed as Exhibit 10.4 with the Company's Annual Report on Form 10-K for the period ended December 31, 2004, which was filed with the Securities and Exchange Commission on March 16, 2005, and incorporated herein by reference).
10.5	Employment Agreement between American Vanguard Corporation and Eric G. Wintemute dated January 15, 2008 (filed as Exhibit 10.5 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007, which was filed with the Securities Exchange Commission on March 17, 2008, and incorporated herein by reference).
10.8	Form of Change of Control Severance Agreement, dated effective as of January 1, 2004, between American Vanguard Corporation and its executive and senior officers (filed as Exhibit 10.2 to the Company's Form 10-Q for the period ended March 31, 2004, which was filed with the Securities Exchange Commission on May 17, 2004, and incorporated herein by reference.)
10.9	Form of Amendment of Change of Control Severance Agreement, dated effective as of July 11, 2008, between American Vanguard Corporation and named executive officers and senior officers (filed as Exhibit 99.1 to the Company's Form 8-K, which was filed on July 11, 2008, with the Securities and Exchange Commission and incorporated herein by reference).
10.10	Form of Indemnification Agreement between American Vanguard Corporation and its Directors (as filed as Exhibit 10.7 to the Company's Annual Report on Form 10-K for the period ended December 31, 2004, which was filed with the Securities and Exchange Commission on March 16, 2005, and incorporated herein by reference).
10.11	Description of Compensatory Arrangements Applicable to Non-Employee Directors (as set forth on page 34 of the Company's Proxy Statement which was filed with the Securities and Exchange Commission on April 22, 2019, and incorporated herein by reference).
10.12	Form of Restricted Stock Agreement between American Vanguard Corporation and named executive officers dated as of November 13, 2020. Filed as exhibit 10.12 to the Company's Form 10-K for the period ended December 31, 2020.

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

Exhibit Number	Description of Exhibit
10.14	Form of Performance-Based Restricted Stock Units Award Agreement between American Vanguard Corporation and named executive officer dated as of November 13, 2020. Filed as exhibit 10.14 to the Company's Form 10-K for the period ended December 31, 2020.
10.15	Form of American Vanguard Corporation Amended and Restated Stock Incentive Plan TSR-Based Restricted Stock Units Award Agreement dated June 6, 2013 (filed as Exhibit 10.15 to the Company's 10-K, which was filed with the Securities Exchange Commission on February 28, 2014, and incorporated herein by reference).
10.16	Form of American Vanguard Corporation Amended and Restated Stock Incentive Plan Performance-Based Restricted Stock Units Award Agreement dated June 6, 2013 (filed as Exhibit 10.16 to the Company's 10-K, which was filed with the Securities Exchange Commission on February 28, 2014, and incorporated herein by reference).
10.17	Third Amendment to Second Amended and Restated Credit Agreement dated as of June 30, 2017 among AMVAC and certain affiliates on the one hand, and a group of commercial lenders led by Bank of the West as agent, swing line lender, and letter of credit issuer, on the other hand (filed as Exhibit 10.1 to the Company's Form 8-K, which was filed with the Securities Exchange Commission on July 6, 2017 and is incorporated herein by reference).
10.18	Fourth Amendment to Second Amended and Restated Credit Agreement dated as of November 27, 2019, among AMVAC and certain affiliates, on the one hand, and a group of commercial lenders led by Bank of the West as agent, swing line lender, and letter of credit issuer, on the other hand (filed with the Company's Form 10-K for the period ended December 31, 2019). Third Amended and Restated Loan and Security Agreement dated August 5, 2021 by and among American Vanguard Corporation et al. and Bank of the West et al. a form of which was filed with the SEC as an exhibit to the Company's Form 8-K on or about August 10, 2021.
21	List of Subsidiaries of the Company.*
23	Consent of BDO USA, LLP, Independent Registered Public Accounting Firm.*
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
32.1	Certifications Pursuant to 18 U.S.C. Section 1350 as adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
101	The following materials from American Vanguard Corp's Annual Report on Form 10-K for the year ended December 31, 2020, formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Operations; (iii) Consolidated Statements of Stockholders' Equity; (iv) Consolidated Statements of Comprehensive Income; (v) Consolidated Statements of Cash Flows; and (vi) Notes to Consolidated Financial Statements, tagged as blocks of text.*
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

(c) Valuation and Qualifying Accounts:

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

**Schedule II-A—Valuation and Qualifying Accounts
Allowance for Doubtful Accounts Receivable (in thousands)**

Fiscal Year Ended	Balance at Beginning of Period	Additions Charged to Costs and Expenses	Foreign exchange impact	Balance at End of Period
December 31, 2021	\$ 3,297	649	(8)	\$ 3,938
December 31, 2020	\$ 2,300	1,002	(5)	\$ 3,297
December 31, 2019	\$ 1,263	1,035	2	\$ 2,300

Inventory Reserve (in thousands)

Fiscal Year Ended	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
December 31, 2021	\$ 2,868	948	(1,141)	\$ 2,675
December 31, 2020	\$ 2,130	1,120	(382)	\$ 2,868
December 31, 2019	\$ 1,989	573	(432)	\$ 2,130

Deferred Tax Asset Valuation Allowance (in thousands)

Fiscal Year Ended	Balance at Beginning of Period	Additions Charged to Costs and Expenses	Other Comprehensive Loss	Deductions	Balance at End of Period
December 31, 2021	\$ —	\$ 3,304	\$ 958	\$ —	\$ 4,262

See accompanying report of independent registered public accounting firm on page 38 of this annual report.

ITEM 16 FORM 10-K SUMMARY

None.

AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, American Vanguard Corporation has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMERICAN VANGUARD CORPORATION

(Registrant)

By: /s/ ERIC G. WINTEMUTE
Eric G. Wintemute
Chief Executive Officer
and Chairman of the Board

March 11, 2022

By: /s/ DAVID T. JOHNSON
David T. Johnson
Chief Financial Officer
and Principal Accounting Officer

March 11, 2022

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated.

By: /s/ ERIC G. WINTEMUTE
Eric G. Wintemute
Principal Executive Officer
and Chairman of the Board

March 11, 2022

By: /s/ DAVID T. JOHNSON
David T. Johnson
Principal Financial Officer
and Principal Accounting Officer

March 11, 2022

By: /s/ DEBRA EDWARDS
Debra Edwards
Director

March 11, 2022

By: /s/ JOHN L. KILLMER
John L. Killmer
Director

March 11, 2022

By: /s/ Marisol Angelini
Marisol Angelini
Director

March 11, 2022

By: /s/ SCOTT D. BASKIN
Scott D. Baskin
Director

March 11, 2022

By: /s/ MORTON D. ERLICH
Morton D. Erlich
Director

March 11, 2022

By: /s/ ALFRED INGULLI
Alfred Ingulli
Director

March 11, 2022

By: /s/ ESMAIL ZIRAKPARVAR
Esmail Zirakparvar
Director

March 11, 2022

By: /s/ ÉMER GUNTER
Émer Gunter
Director

March 11, 2022

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

Report of Independent Registered Public Accounting Firm

Stockholders and Board of Directors
American Vanguard Corporation
Newport Beach, California

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of American Vanguard Corporation (the “Company”) as of December 31, 2021 and 2020, the related consolidated statements of operations and comprehensive income, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated March 11, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits 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. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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 the critical audit matter 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.

Accrued Program Costs

As discussed in notes to the 2021 consolidated financial statements, the Company offers discounts to its customers based on various programs. As of December 31, 2021, the Company had accrued program costs of \$63.2 million and program costs recorded as a reduction of gross sales totaled \$99.5 million in 2021. These discounts represent variable consideration and revenues from sales are recorded at the net sales price, which is the transaction price, and includes estimates of variable consideration. Variable consideration includes amounts expected to be paid to customers using the expected value method. Each quarter management compares individual sale transactions with programs to determine what, if any, estimated program liabilities have been incurred.

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We identified management's determination of variable consideration related to program costs as a critical audit matter. The principal considerations for our determination included significant inputs and assumptions utilized by management in determining the variable consideration for certain programs. Auditing these elements involved especially challenging auditor judgment due to the nature and extent of audit effort required to address this matter.

The primary procedures we performed to address the critical audit matter included:

- Testing the design and operating effectiveness of certain internal controls related to management's accounting for program costs, specifically including controls over: (i) the calculation of significant components of the program costs, and (ii) the completeness and accuracy of program costs.
- Assessing the completeness and reasonableness of variable and incremental programs inclusive of significant inputs and assumptions used to determine the variable consideration through (i) evaluating current year accrued program costs by material product line against historical program cost payments, (ii) assessing management's assumptions against trends and historical metrics and (iii) performing retrospective reviews utilizing available historical payment of program costs compared to estimates made in prior periods.
- Testing the computation of the accrued program costs by re-performing or independently calculating portions of the accrued program costs and testing of the accrued program costs payments made to customers on a sample basis. Testing material portions of the underlying data used to relevant source documents, accounting records and approved program rates or amounts.

/s/ BDO USA, LLP

We have served as the Company's auditor since 1991.

Costa Mesa, California
March 11, 2022

**AMERICAN VANGUARD CORPORATION
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**CONSOLIDATED BALANCE SHEETS
December 31, 2021 and 2020
(In thousands, except share data)**

	2021	2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 16,285	\$ 15,923
Receivables:		
Trade, net of allowance for doubtful accounts of \$3,938 and \$3,297, respectively	149,326	130,029
Other	9,595	6,969
Total receivables, net	158,921	136,998
Inventories, net	154,306	163,784
Prepaid expenses	12,488	10,499
Income taxes receivable	—	3,046
Total current assets	342,000	330,250
Property, plant and equipment, net	66,111	65,382
Operating lease right-of-use assets	25,386	12,198
Intangible assets, net of amortization	197,841	197,514
Goodwill	46,260	52,108
Other assets	16,292	20,077
Deferred income tax assets, net	270	2,764
Total assets	<u>\$ 694,160</u>	<u>\$ 680,293</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Current installments of other liabilities	\$ 802	\$ 2,647
Accounts payable	67,140	59,253
Deferred revenue	63,064	43,611
Accrued program costs	63,245	45,441
Accrued expenses and other payables	20,745	16,184
Income taxes payable	3,006	—
Operating lease liabilities, current	5,059	4,188
Total current liabilities	223,061	171,324
Long-term debt, net of deferred loan fees	52,240	107,442
Other liabilities, excluding current installments	5,335	9,054
Operating lease liabilities, long-term	20,780	8,177
Deferred income tax liabilities, net	20,006	23,560
Total liabilities	<u>321,422</u>	<u>319,557</u>
Commitments and contingent liabilities		
Stockholders' equity:		
Preferred stock, \$.10 par value per share; authorized 400,000 shares; none issued	—	—
Common stock, \$.10 par value per share; authorized 40,000,000 shares; issued 34,248,218 shares in 2021 and 33,922,433 shares in 2020	3,426	3,394
Additional paid-in capital	101,450	96,642
Accumulated other comprehensive loss	(13,784)	(9,322)
Retained earnings	304,385	288,182
	<u>395,477</u>	<u>378,896</u>
Less treasury stock at cost, 3,361,040 shares in 2021 and 3,061,040 in 2020	(22,739)	(18,160)
Total stockholders' equity	<u>372,738</u>	<u>360,736</u>
Total liabilities and stockholders' equity	<u>\$ 694,160</u>	<u>\$ 680,293</u>

See summary of significant accounting policies and notes to consolidated financial statements.

**AMERICAN VANGUARD CORPORATION
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CONSOLIDATED STATEMENTS OF OPERATIONS
Years ended December 31, 2021, 2020 and 2019
(In thousands, except per share data)

	2021	2020	2019
Net sales	\$ 556,872	\$ 458,704	\$ 468,186
Cost of sales	(343,629)	(286,114)	(290,832)
Gross profit	213,243	172,590	177,354
Operating expenses	(182,468)	(154,339)	(151,133)
Bargain purchase gain on business acquisition	171	4,657	—
Operating income	30,946	22,908	26,221
Change in fair value of equity investments, net	(790)	717	—
Other income	672	—	—
Interest expense, net	(3,687)	(5,178)	(7,209)
Income before provision for income taxes and loss on equity method investment	27,141	18,447	19,012
Provision for income taxes	(8,166)	(3,080)	(5,202)
Income before loss on equity method investment	18,975	15,367	13,810
Less loss from equity method investment	(388)	(125)	(209)
Net income	<u>\$ 18,587</u>	<u>\$ 15,242</u>	<u>\$ 13,601</u>
Earnings per common share—basic	<u>\$ 0.62</u>	<u>\$ 0.52</u>	<u>\$ 0.47</u>
Earnings per common share—assuming dilution	<u>\$ 0.61</u>	<u>\$ 0.51</u>	<u>\$ 0.46</u>
Weighted average shares outstanding—basic	<u>29,811</u>	<u>29,450</u>	<u>29,030</u>
Weighted average shares outstanding—assuming dilution	<u>30,410</u>	<u>29,993</u>	<u>29,656</u>

See summary of significant accounting policies and notes to consolidated financial statements.

**AMERICAN VANGUARD CORPORATION
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CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Years ended December 31, 2021, 2020 and 2019
(In thousands)

	2021	2020	2019
Net income	\$ 18,587	\$ 15,242	\$ 13,601
Other comprehensive loss			
Foreign currency translation adjustment, net of tax effects	(4,462)	(3,624)	(1,191)
Comprehensive income	<u>\$ 14,125</u>	<u>\$ 11,618</u>	<u>\$ 12,410</u>

See summary of significant accounting policies and notes to consolidated financial statements

**AMERICAN VANGUARD CORPORATION
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CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Years ended December 31, 2021, 2020 and 2019
(In thousands, except share data)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive loss	Retained Earnings	Treasury Stock		AVD Total
	Shares	Amount				Shares	Amount	
Balance, December 31, 2018	32,752,827	\$ 3,276	\$ 83,177	\$ (4,507)	\$ 262,840	2,902,992	\$ (15,556)	\$ 329,230
Stocks issued under ESPP	47,229	5	711	—	—	—	—	716
Cash dividends on common stock (\$0.08 per share)	—	—	—	—	(2,323)	—	—	(2,323)
Foreign currency translation adjustment, net	—	—	—	(1,191)	—	—	—	(1,191)
Stock based compensation	—	—	7,160	—	—	—	—	7,160
Stock options exercised, grants, termination, and vesting of restricted stock units (net of shares in lieu of taxes)	433,558	43	(476)	—	—	—	—	(433)
Shares repurchased	—	—	—	—	—	158,048	(2,604)	(2,604)
Net income	—	—	—	—	13,601	—	—	13,601
Balance, December 31, 2019	33,233,614	3,324	90,572	(5,698)	274,118	3,061,040	(18,160)	344,156
Stocks issued under ESPP	49,668	5	716	—	—	—	—	721
Cash dividends on common stock (\$0.04 per share)	—	—	—	—	(1,178)	—	—	(1,178)
Foreign currency translation adjustment, net	—	—	—	(3,624)	—	—	—	(3,624)
Stock based compensation	—	—	6,561	—	—	—	—	6,561
Stock options exercised, grants, termination, and vesting of restricted stock units (net of shares in lieu of taxes)	639,151	65	(1,207)	—	—	—	—	(1,142)
Net income	—	—	—	—	15,242	—	—	15,242
Balance, December 31, 2020	33,922,433	3,394	96,642	(9,322)	288,182	3,061,040	(18,160)	360,736
Stocks issued under ESPP	50,782	4	739	—	—	—	—	743
Cash dividends on common stock (\$0.08 per share)	—	—	—	—	(2,384)	—	—	(2,384)
Foreign currency translation adjustment, net	—	—	—	(4,462)	—	—	—	(4,462)
Stock based compensation	—	—	6,880	—	—	—	—	6,880
Stock options exercised, grants, termination, and vesting of restricted stock units (net of shares in lieu of taxes)	275,003	28	(2,811)	—	—	—	—	(2,783)
Shares repurchased	—	—	—	—	—	300,000	(4,579)	(4,579)
Net income	—	—	—	—	18,587	—	—	18,587
Balance, December 31, 2021	<u>34,248,218</u>	<u>\$ 3,426</u>	<u>\$ 101,450</u>	<u>\$ (13,784)</u>	<u>\$ 304,385</u>	<u>3,361,040</u>	<u>\$ (22,739)</u>	<u>\$ 372,738</u>

See summary of significant accounting policies and notes to consolidated financial statements

**AMERICAN VANGUARD CORPORATION
AND SUBSIDIARIES**

CONSOLIDATED STATEMENTS OF CASH FLOWS
Years ended December 31, 2021, 2020 and 2019
(In thousands)

	2021	2020	2019
Increase cash			
Cash flows from operating activities:			
Net income	\$ 18,587	\$ 15,242	\$ 13,601
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of property, plant and equipment and intangible assets	22,229	19,902	18,643
Loss on disposal of property, plant and equipment	194	119	—
Amortization of other long-term assets	3,943	3,947	3,983
Accretion of discounted liabilities	(8)	9	72
Amortization of deferred loan fees	367	300	224
Provision for bad debts	649	1,002	1,035
Loan principal and interest forgiveness	(672)	—	—
Fair value adjustment of contingent consideration	758	250	(4,120)
Decrease in environmental liability	(167)	(1,155)	—
Stock-based compensation	6,880	6,561	7,160
Increase (decrease) in deferred income taxes	(2,090)	969	2,616
Changes in liabilities for uncertain tax positions or unrecognized tax benefits	(1,783)	(2,092)	263
Change in equity investment fair value	790	(717)	—
Loss from equity method investment	388	125	209
Bargain purchase gain	(171)	(4,657)	—
Net foreign currency adjustment	(225)	126	275
Changes in assets and liabilities associated with operations, net of business combinations:			
(Increase) decrease in net receivables	(24,347)	15,407	(11,513)
Decrease in inventories	8,130	7,421	3,817
(Increase) decrease in income tax receivable, net	6,051	(287)	(6,855)
(Increase) decrease in prepaid expenses and other assets	(3,354)	140	(876)
Increase in net operating lease liability	286	18	149
Increase (decrease) in accounts payable	8,783	(8,199)	(7,912)
Increase (decrease) in deferred revenue	19,280	36,803	(13,355)
Increase (decrease) in accrued program costs	17,877	(2,517)	5,797
Increase (decrease) in other payables and accrued expenses	3,986	1,607	(3,600)
Net cash provided by operating activities	86,361	90,324	9,613
Cash flows from investing activities:			
Capital expenditures	(9,518)	(11,249)	(12,985)
Acquisitions of businesses and product lines	(10,000)	(19,342)	(37,972)
Intangible assets	(524)	(4,014)	(3,880)
Investment	—	(1,190)	—
Net cash used in investing activities	(20,042)	(35,795)	(54,837)
Cash flows from financing activities:			
Net (payments) borrowings under line of credit agreement	(55,569)	(41,624)	51,900
Payment of contingent consideration	(1,301)	(1,227)	(850)
Net receipt from the issuance of common stock under ESPP	743	721	716
Net receipt from the exercise of stock options	172	1,603	680
Net payment from common stock purchased for tax withholding	(2,955)	(2,745)	(1,113)
Repurchase of common stock	(4,579)	—	(2,604)
Payment of cash dividends	(2,382)	(1,168)	(2,323)
Net cash (used in) provided by financing activities	(65,871)	(44,440)	46,406
Net increase in cash and cash equivalents	448	10,089	1,182
Effect of exchange rate changes on cash and cash equivalents	(86)	(747)	(769)
Cash and cash equivalents at beginning of year	15,923	6,581	6,168
Cash and cash equivalents at end of year	<u>\$ 16,285</u>	<u>\$ 15,923</u>	<u>\$ 6,581</u>

See summary of significant accounting policies and notes to the consolidated financial statements

**AMERICAN VANGUARD CORPORATION
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**SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Years Ended December 31, 2021, 2020 and 2019

(Dollars in thousands, except share data)

(1) Description of Business and Summary of Significant Accounting Policies

American Vanguard Corporation (the “Company” or “AVD”) is primarily a specialty chemical manufacturer that develops and markets safe and effective products for agricultural, commercial and consumer uses. The Company manufactures and formulates chemicals for crops, human and animal protection. The consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. The Company operates within a single operating segment.

All U.S. Dollar amounts reflected in the notes to the consolidated financial statements are presented in thousands, except per share data.

The Company is closely monitoring the impact of the novel coronavirus (COVID-19) pandemic on all aspects of its business, including how the pandemic has impacted, and may possibly impact, its customers, business partners, and employees. The Company is considered an essential business by most governments in the jurisdictions and territories in which the Company operates and, as a result, did not incur significant disruptions from the COVID-19 pandemic during the years ended December 31, 2021 and 2020, respectively.

Looking forward, the Company is unable to predict the impact that the pandemic may have on its future financial condition, results of operations and cash flows due to numerous uncertainties. The extent to which the COVID-19 pandemic impacts the Company’s operations and those of its customers in the near term will depend on future developments, which are highly uncertain and, beyond extrapolating our experience over the past year, cannot be predicted with confidence. The Company continues to monitor its business for adverse impacts of the pandemic, including volatility in the foreign exchange markets, demand, supply-chain disruptions in certain markets, and increased costs of employee safety, among others.

The Company believes that the combination of its cash flows from future operations, current cash on hand and the availability under the Company’s credit facility will be sufficient to meet its working capital and capital expenditure requirements and will provide the Company with adequate liquidity to meet its anticipated operating needs for at least the next 12 months from the issuance of these consolidated financial statements. Although operating activities are expected to provide cash, to the extent of growth in the future, its operating and investing activities will use cash and, consequently, this growth may require the Company to access some or all of the availability under the credit facility. It is also possible that additional sources of finance may be necessary to support additional growth.

Based on similar economic and operational characteristics, the Company’s business is aggregated into one reportable category. Selective enterprise information is as follows:

	2021	2020	2019
Net sales:			
U.S. crop	\$ 263,632	\$ 211,357	\$ 220,635
U.S. non-crop	78,605	60,367	61,590
Total U.S.	342,237	271,724	282,225
International	214,635	186,980	185,961
Total net sales	<u>\$ 556,872</u>	<u>\$ 458,704</u>	<u>\$ 468,186</u>
Gross profit:			
U.S. crop	\$ 109,568	\$ 92,723	\$ 95,429
U.S. non-crop	37,443	27,842	29,713
Total U.S.	147,011	120,565	125,142
International	66,232	52,025	52,212
Total gross profit	<u>\$ 213,243</u>	<u>\$ 172,590</u>	<u>\$ 177,354</u>

Due to elements inherent to the Company’s business, such as differing and unpredictable weather patterns, crop growing cycles, changes in product mix of sales and ordering patterns that may vary in timing, measuring the Company’s performance on a quarterly basis (for example, gross profit margins on a quarterly basis may vary significantly) even when such comparisons are favorable, is not as good an indicator as full-year comparisons.

Reclassifications—Certain prior years’ amounts have been reclassified to conform to the current year’s presentation.

Cost of Sales— Cost of sales is the Company’s capitalized cost of inventory procurement and production that is sold in the respective periods. These costs include direct labor, materials, and manufacturing overhead. Additionally the Company also includes such cost centers as Health and Safety, Environmental, Maintenance and Quality Control in cost of sales.

Operating Expenses—Operating expenses include cost centers for Selling, General and Administrative, Research, Product Development, and Regulatory, and outbound Freight, Delivery and Warehousing.

	2021	2020	2019
Selling	\$ 48,604	\$ 42,389	\$ 45,121
General and administrative	61,685	48,828	46,593
Research, product development and regulatory	28,855	26,310	24,070
Freight, delivery and warehousing	43,324	36,812	35,349
Total operating expenses	<u>\$ 182,468</u>	<u>\$ 154,339</u>	<u>\$ 151,133</u>

Advertising Expense—The Company expenses advertising costs in the period incurred. Advertising expenses, which include promotional costs, are recognized as selling expenses in the consolidated statements of operations and were \$5,201, \$4,833 and \$5,520 in 2021, 2020 and 2019, respectively.

Cash and cash equivalents—The Company’s cash equivalents consist primarily of certificates of deposit with an initial term of less than three months. For purposes of the consolidated statements of cash flows, the Company considers all highly liquid debt instruments with original maturities of three months or less to be cash equivalents. The Company maintains cash and cash equivalent balances that exceed federally insured limits with a number of financial institutions.

Inventories—The Company values its inventories at lower of cost or net realizable value. Cost is determined by the first-in, first-out (“FIFO”) or average cost method, including material, labor, factory overhead and subcontracting services. The Company writes down its inventory carrying values as a result of net realizable value assessments of slow moving and obsolete inventory and other annual adjustments to ensure that its standard costs continue to closely reflect actual cost. The Company recorded an inventory reserve allowance of \$2,675 and \$2,868 at December 31, 2021 and 2020, respectively.

The components of inventories, net of reserve allowance, consist of the following:

	2021	2020
Finished products	\$ 138,159	\$ 149,415
Raw materials	16,147	14,369
Total inventories, net	<u>\$ 154,306</u>	<u>\$ 163,784</u>

Leases— The Company has operating leases for warehouses, manufacturing facilities, offices, cars, railcars and certain equipment for which operating lease right-of-use (“ROU”) assets and corresponding lease liabilities are recorded. The Company measures ROU assets throughout the lease term at the carrying amount of the lease liability, plus initial direct costs, plus (minus) any prepaid (accrued) lease payments, less the unamortized balance of lease incentives received. The lease liabilities are measured at the present value of the unpaid lease payments at the lease commencement date. Leases that include both lease and non-lease components are accounted for as a single lease component for each asset class, except for warehouse leases.

The minimum payments under operating leases are recognized on a straight-line basis over the lease term in the consolidated statements of operations. Operating lease expenses related to variable lease payments are recognized in cost of sales or as operating expenses in a manner consistent with the nature of the underlying lease and as the events, activities, or circumstances in the lease agreement occur. Leases with a term of less than 12 months are not recognized on the consolidated balance sheets, and the related lease expenses are recognized in the consolidated statements of operations on a straight-line basis over the lease term.

The accounting for leases requires management to exercise judgment and make estimates in determining the applicable discount rate, lease term and payments due under a lease. Most of our leases do not provide an implicit interest rate, nor is it available to us from our lessors. As an alternative, the Company uses our estimated incremental borrowing rate, which is derived from information available at the lease commencement date, including publicly available data, in determining the present value of lease payments. The Company also estimated the fair value of the lease and non-lease components for some of our warehouse leases based on market data and cost data.

The lease term includes the non-cancellable period of the lease plus any additional periods covered by either an option to extend (or not terminate) that the Company is reasonably certain to exercise. The Company has leases with a lease term ranging from 1 year to 20 years.

The operating leases of the Company do not contain major restrictions or covenants such as those relating to dividends or additional financial obligations. Finance leases are immaterial to the consolidated financial statements. There were no lease transactions with related parties during 2021, 2020 and 2019.

The operating lease expense for the years ended December 31, 2021, 2020 and 2019 was \$5,750, \$5,662 and \$5,398, respectively. Lease expenses related to variable lease payments and short-term leases were immaterial. Additional information related to operating leases are as follows:

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities	\$ 5,750	\$ 5,657	\$ 5,398
ROU assets obtained in exchange for new liabilities	\$ 18,521	\$ 6,309	\$ 3,580

The weighted-average remaining lease term and discount rate related to the operating leases as of December 31, 2021, 2020 and 2019 were as follows:

	December 31, 2021	December 31, 2020
Weighted-average remaining lease term (in years)	6.72	4.62
Weighted-average discount rate	4.02%	3.81%

Future minimum lease payments under non-cancellable operating leases as of December 31, 2021 were as follows:

2022	\$ 5,899
2023	4,884
2024	4,130
2025	3,705
2026	2,852
Thereafter	8,254
Total lease payments	\$ 29,724
Less: imputed interest	(3,885)
Total	<u>\$ 25,839</u>
Amounts recognized in the consolidated balance sheets:	
Operating lease liabilities, current	\$ 5,059
Operating lease liabilities, long term	\$ 20,780

Revenue Recognition— The Company recognizes revenue when control of the ordered goods or services are transferred to its customers in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services. The Company sells its products mainly to distributors and retailers. The products include insecticides, herbicides, soil fumigants, fungicides and biologicals. In addition, the Company recognizes royalty income related to licensing arrangements which qualify as functional licenses rather than symbolic licenses. Upon signing a new licensing agreement, the Company typically receives up-front fees, which are generally characterized as non-refundable royalties. These fees are recognized as revenue upon the execution of the license agreements. Minimum royalty fees are recognized once the Company has an enforceable right for payment. Sales-based royalty fees are typically recognized when the sales occur. The Company calculates and accrues estimated royalties based on the agreement terms and correspondence with the licensees regarding actual sales. Based on similar economic and operational characteristics, the Company’s business is aggregated into one reportable segment. Selective enterprise information of sales disaggregated by category and geographic region is as follows:

	2021	2020	2019
Net sales:			
U.S. crop	\$ 263,632	\$ 211,357	\$ 220,635
U.S. non-crop	78,605	60,367	61,590
Total U.S.	342,237	271,724	282,225
International	214,635	186,980	185,961
Total net sales	<u>\$ 556,872</u>	<u>\$ 458,704</u>	<u>\$ 468,186</u>
Timing of revenue recognition:			
Goods and services transferred at a point in time	\$ 556,372	\$ 455,726	\$ 464,967
Goods and services transferred over time	500	2,978	3,219
Total net sales	<u>\$ 556,872</u>	<u>\$ 458,704</u>	<u>\$ 468,186</u>

Net sales of U.S. crop and U.S. non-crop for 2020 in the table above were each revised. Net sales of U.S. crop sales are \$11,810 lower than previously reported and net sales of U.S. non-crop are \$11,810 higher than previously reported. There was no overall effect on U.S. net sales.

Performance Obligations — A performance obligation is a promise in a contract or sales order to transfer a distinct good or service to the customer. A transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. Certain of the Company’s sales orders have multiple performance obligations, as the promise to transfer individual goods or services is separately identifiable from other promises in the sales orders. For sales orders with multiple performance obligations, the Company allocates the sales order’s transaction price to each performance obligation based on its relative stand-alone selling price. The stand-alone selling prices are determined based on the prices at which the Company separately sells these products. The Company’s performance obligations are satisfied either at a point in time or over time as work progresses.

On December 31, 2021, the Company had \$63,064 of remaining performance obligations, which are comprised of deferred revenue and services not yet delivered. The Company expects to recognize all these remaining performance obligations as revenue in fiscal year 2022.

Practical Expedients — The Company has elected to use the following practical expedients (i) not to adjust the promised amount of consideration for the effects of a significant financing component when the Company expects, at contract inception, that the period between the Company’s transfer of a promised product or service to a customer and when the customer pays for that product or service will be one year or less and (ii) treat shipping and handling activities that occur after control of the good transfers to the customer as fulfillment activities.

Contract Assets— The contract assets relate to royalties earned on certain functional licenses granted for the use of the Company’s intellectual property, and a contract manufacturing agreement for the production of products without alternative use.

	December 31, 2021	December 31, 2020
Contract assets	\$ 3,900	\$ 3,200

The short-term and long-term assets of \$1,825 and \$2,075 are included in other receivables and other assets, respectively, on the consolidated balance sheets as of December 31, 2021. The short-term and long-term assets of \$1,725 and \$1,475 are included in other receivables and other assets, respectively, on the consolidated balance sheets as of December 31, 2020.

Deferred Revenue—The timing of revenue recognition, billings and cash collections may result in deferred revenue in the consolidated balance sheets. The Company sometimes receives payments from its customers in advance of goods and services being provided, in return for participation in its pre-payments related cash incentive program. These pre-payments are held on the Company’s consolidated balance sheets as deferred revenue until control of the related performance obligations has passed to the customers, which is generally upon shipment of products. There is no significant financing component related to the pre-payments since the Company expects to transfer the products within one year from the date payment is received. A similar number of the Company’s customers participated in the Company’s cash incentive program in 2021, and at an increased average level, which resulted in an increase in the Company’s deferred revenue balance as of December 31, 2021, compared to the prior year.

	December 31, 2021	December 31, 2020
Deferred revenue	\$ 63,064	\$ 43,611

Revenue recognized for the years ended December 31, 2021, 2020, and 2019 that was included in the deferred revenue balance at the beginning of 2021, 2020, and 2019 was \$37,779, \$5,652, and \$20,043 respectively.

Allowance for Current Expected Credit Losses— The Company maintains an allowance to cover its Current Expected Credit Losses ("CECL") on its trade receivables, other receivables and contract assets arising from the possible failure of customers to make contractual payments. The Company estimates credit losses expected over the life of its trade receivables, other receivables and contract assets based on historical information combined with current conditions that may affect a customer’s ability to pay and reasonable and supportable forecasts. In most instances, the Company’s policy is to write-off trade receivables when they are deemed uncollectible. The vast majority of the Company's trade receivables, other receivables and contract assets are less than 365 days. Under the CECL impairment model, the Company develops and documents its allowance for credit losses on its trade receivables based on multiple portfolios. The determination of portfolios is based primarily on geographical location, type of customer and aging.

Accrued Program Costs— The Company offers various discounts to customers based on the volume purchased within a defined period, other pricing adjustments, some grower volume incentives or other key performance indicator driven payments, which are usually made at the end of a growing season, to distributors, retailers or growers. The Company describes these payments as “Programs.” Programs are a critical part of doing business in both the U.S. crop and non-crop chemicals marketplaces. These discount Programs represent variable consideration. Revenues from sales are recorded at the net sales price, which is the transaction price net of the impact of Programs and includes estimates of variable consideration. Variable consideration includes amounts expected to be paid to its customers estimated using the expected value method. Each quarter management compares individual sale transactions with Programs to determine what, if any, estimated program liabilities have been incurred. Once this initial calculation is made for the specific quarter, sales and marketing management, along with executive and financial management, review the accumulated Program balance and, for volume driven payments, make assessments of whether or not customers are tracking in a manner that indicates that they will meet the requirements set out in agreed upon terms and conditions attached to each Program. Following this assessment, management will make adjustments to the accumulated accrual to properly reflect the Company’s best estimate of the liability at the balance sheet date. Programs are paid out predominantly on an annual basis, usually in the final quarter of the financial year or the first quarter of the following year.

Debt Issuance Costs and Debt Discount— The Company capitalizes costs incurred with borrowing and records debt issuance costs as a reduction to the debt amount. These costs in connection with the Company’s revolving line of credit are amortized ratably over the life of the borrowing and included in interest expense.

Property, Plant and Equipment and Depreciation— Property, plant and equipment includes the cost of land, buildings, machinery and equipment, office furniture and fixtures, automobiles, construction projects and significant improvements to existing plant and equipment. Interest costs related to significant construction projects are capitalized at the Company’s current weighted average effective interest rate. Expenditures for minor repairs and maintenance are expensed as incurred. When property or equipment is sold or otherwise disposed of, the related cost and accumulated depreciation are removed from the respective accounts and the gain or loss realized on disposition is reflected in operations. All plant and equipment are depreciated using the straight-line method, utilizing the estimated useful property lives. See Note 2 for useful lives.

Intangible Assets— The primary identifiable intangible assets of the Company relate to assets associated with its product and business acquisitions. All the Company’s intangible assets are amortizing assets with finite lives. The estimated useful life of an identifiable intangible asset is based upon several factors including the effects of demand, competition, and expected changes in the marketability of the Company’s products.

Business Combinations— The Company uses its best estimates and assumptions to assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date. The Company’s estimates are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the fair value of these tangible and intangible assets acquired and liabilities assumed, with the corresponding offset to goodwill or an adjustment to the gain from a bargain purchase. In addition, when appropriate uncertain tax positions and tax-related valuation allowances are initially recorded in connection with a business combination as of the acquisition date. The Company continues to collect information and reevaluates these estimates and assumptions quarterly and records any adjustments to the Company’s preliminary estimates to goodwill or an adjustment to the gain from a bargain purchase, provided that the Company is within the measurement period. Upon the conclusion of the measurement period or final determination of the fair value of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the Company’s consolidated statement of operations.

Certain of our acquisition agreements include contingent earn-out arrangements, which are generally based on the achievement of future income thresholds. The fair values of these earn-out arrangements are included as part of the purchase price of the acquired companies on their respective acquisition dates. For each transaction, the Company engages third-party valuation specialists to assist it in making estimates of the fair value of contingent earn-out payments, both as part of the initial purchase price and at each subsequent financial statement date until the end of the related performance period. The Company records the estimated fair value of contingent consideration as a liability on the consolidated balance sheets.

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could be materially different from the initial estimates or prior quarterly amounts. Changes in the estimated fair value of our contingent earn-out liabilities are reported in operating results.

Asset Acquisitions— If an acquisition of an asset or group of assets does not meet the definition of a business, the transaction is accounted for as an asset acquisition rather than a business combination. An asset acquisition does not result in the recognition of goodwill and transaction costs are capitalized as part of the cost of the asset or group of assets acquired. The Company uses its best estimates and assumptions to assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date. The acquisitions costs are allocated to the assets acquired on a relative fair value basis.

Impairment— The carrying values of long-lived assets other than goodwill are reviewed for impairment annually and/or whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. The Company evaluates recoverability of an asset group by comparing the carrying value to the future undiscounted cash flows that it expects to generate from the asset group. If the comparison indicates that the carrying value of an asset group is not recoverable, measurement of the impairment loss is based on the fair value of the asset. There were no circumstances that would indicate any impairment of the carrying value of these long-lived assets and no material impairment losses were recorded in 2021, 2020, or 2019.

The Company reviews goodwill for impairment utilizing either a qualitative or quantitative assessment. If the Company decides that it is appropriate to perform a qualitative assessment and concludes that the fair value of a reporting unit more likely than not exceeds its carrying value, no further evaluation is necessary. If the Company performs a quantitative assessment, the Company compares the fair value of a reporting unit with its carrying amounts and recognizes an impairment charge for the amount that the carrying amount exceeds the reporting unit’s fair value. The Company annually tests goodwill for impairment in beginning of the fourth quarter, or earlier if triggering events occur. The Company did not record any impairment losses in 2021, 2020, or 2019.

Fair Value of Financial Instruments— The accounting standard for fair value measurements provides a framework for measuring fair value and requires expanded disclosures regarding fair value measurements. Fair value is defined as the price that would be received for an asset or the exit price that would be paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. This accounting standard established a fair value hierarchy, which requires an entity to maximize the use of observable inputs, where available. The following summarizes the three levels of inputs required:

- Level 1 – Quoted prices in active markets for identical assets or liabilities.
- Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 – Inputs that are generally unobservable and typically reflect management’s estimate of assumptions that market participants would use in pricing the asset or liability.

The carrying amount of the Company’s financial instruments, which principally include cash and cash equivalents, short-term investments, accounts receivable, long-term investments, accounts payable and accrued expenses approximate fair value because of the relatively short maturity of such instruments. The carrying amount of the Company’s short-term and long-term borrowings, which are considered Level 2 liabilities, approximates fair value based upon current rates and terms available to the Company for similar debt.

We measure our contingent earn-out liabilities in connection with acquisitions at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy. We may use various valuation techniques depending on the terms and conditions of the contingent consideration including a Monte-Carlo simulation. This simulation uses probability distribution for each significant input to produce hundreds or thousands of possible outcomes and the results are analyzed to determine probabilities of different outcomes occurring. Refer to Note 10 for a reconciliation of the Company's contingent consideration.

Foreign Currency Translation—Certain international operations use the respective local currencies as their functional currency, while other international operations use the U.S. Dollar as their functional currency. The Company considers the U.S. Dollar as its reporting currency. Translation adjustments for subsidiaries where the functional currency is its local currency are included in other comprehensive income (loss). Foreign currency transaction gains (losses) resulting from exchange rate fluctuation on transactions denominated in a currency other than the functional currency are reported in earnings. Assets and liabilities of the foreign operations denominated in local currencies are translated at the rate of exchange at the balance sheet date. Revenues and expenses are translated at the weighted average rate of exchange during the period. Translations of intercompany loans of a long-term investment nature are included as a component of translation adjustment in other comprehensive loss.

Income Taxes—The Company utilizes the liability method of accounting for income taxes as set forth in ASC 740. Under the liability method, deferred taxes are determined based on the temporary differences between the financial statement and tax basis of assets and liabilities using tax rates expected to be in effect during the years in which the basis differences reverse. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized. In determining the need for valuation allowances, the Company considers projected future taxable income and the availability of tax planning strategies. If in the future the Company determines that it would not be able to realize its recorded deferred tax assets, an increase in the valuation allowance would be recorded, decreasing earnings in the period in which such determination is made.

The Company assesses its income tax positions and records tax benefits for all years subject to examination based upon the Company's evaluation of the facts, circumstances and information available at the reporting date. For those tax positions where there is greater than 50% likelihood that a tax benefit will be sustained, the Company has recorded the largest amount of tax benefit that may potentially be realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where there is less than 50% likelihood that a tax benefit will be sustained, no tax benefit has been recognized in the consolidated financial statements.

Per Share Information—Basic earnings per share ("EPS") is computed as net income divided by the weighted average number of shares of common stock outstanding during the period. Diluted EPS reflects potential dilution to EPS that could occur if securities or other contracts, which, for the Company, consists of restricted stock grants and options to purchase shares of the Company's common stock, are exercised as calculated using the treasury stock method.

The components of basic and diluted earnings per share were as follows:

	2021	2020	2019
Numerator:			
Net income	\$ 18,587	\$ 15,242	\$ 13,601
Denominator:			
Weighted average shares outstanding—basic	29,811	29,450	29,030
Dilutive effect of stock options and grants	599	543	626
Weighted average shares outstanding—diluted	30,410	29,993	29,656

For the years ended December 31, 2021, 2020, and 2019, no options or grants were excluded from the computation.

Use of Estimates—The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities (including those related to litigation), and revenues, at the date that the consolidated financial statements are prepared. Significant estimates relate to the allowance for doubtful accounts, inventory reserves, impairment of long-lived assets, investments and goodwill, assets acquired, and liabilities assumed in connections with business combinations and asset acquisitions, accrued program costs, stock-based compensation and income taxes. Actual results could materially differ from those estimates.

Total comprehensive income—In addition to net income, total comprehensive income (loss) includes changes in equity that are excluded from the consolidated statements of operations and are recorded directly into a separate section of stockholders' equity on the consolidated balance sheets. For the years ended December 31, 2021, 2020, and 2019, total comprehensive income consisted of net income and foreign currency translation adjustments.

Stock-Based Compensation—The Company estimates the fair value of share-based payment awards on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in the Company’s consolidated statements of operations.

Stock-based compensation expense recognized during the period is based on the fair value of the portion of share-based payment awards that is ultimately expected to vest during the period. Stock-based compensation expense recognized is reduced for estimated forfeitures. Estimated forfeitures recognized in the Company’s consolidated statements of operations reduced compensation expense by \$320, \$222, and \$191 for the years ended December 31, 2021, 2020, and 2019, respectively. The Company estimates that 17.2% of both restricted stock grants and performance-based restricted shares that are currently subject to vesting will be forfeited. These estimates are reviewed quarterly and revised as necessary.

The Company uses the Black-Scholes option-pricing model (“Black-Scholes model”) to value option grants using the following weighted average assumptions (i.e. risk-free interest rate, dividend yield, volatility and average lives). There were no stock options granted during 2021, 2020 or 2019.

The expected volatility and expected life assumptions are complex and use subjective variables. The variables take into consideration, among other things, actual and projected employee stock option exercise behavior. The Company estimates the expected term or vesting period using the “safe harbor” provisions of Staff Accounting Bulletin (“SAB”) 107 and SAB 110. The Company used historical volatility as a proxy for estimating expected volatility.

The Company values restricted stock grants using the Company’s traded stock price at closing on the date of grant. The weighted average grant-date fair values of restricted stock grants during 2021, 2020, and 2019 were \$20.00, \$14.39, and \$16.84, respectively.

Recently Issued Accounting Guidance:

Recent Accounting Standards Adopted:

In December 2019, the FASB issued ASU no. 2019-12, “*Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*,” (“ASU No. 2019-12”). The amendment removes certain exceptions to the general income tax accounting methodology including an exception for the recognition of a deferred tax liability when a foreign subsidiary becomes an equity method investment and an exception for interim periods showing operating losses in excess of anticipated operating losses for the year. The amendment also reduces the complexity surrounding franchise tax recognition; the step up in the tax basis of goodwill in conjunction with business combinations; and the accounting for the effect of changes in tax laws enacted during interim periods. The Company adopted ASU 2019-12 as of January 1, 2021. The adoption did not result in a material change to the Company’s Consolidated Financial Statements.

Accounting standards not yet adopted:

In November 2021, the Financial Accounting Standards Board (the “FASB”) issued ASU No. 2021-10, “Disclosures by Business Entities about Government Assistance.” The ASU codifies new requirements to disclose information about the nature of certain government assistance received, the accounting policy used to account for the transactions, the location in the financial statements where such transactions were recorded and significant terms and conditions associated with such transactions. The guidance is effective for annual periods beginning after December 15, 2021. The Company does not expect the adoption of ASU No. 2021-10 to have a material impact to its Consolidated Financial Statements.

In March 2020, the FASB issued ASU No. 2020-04, “Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting.” The pronouncement provides temporary optional expedients and exceptions to the current guidance on contract modifications and hedge accounting to ease the financial reporting burden related to the expected market transition from the London Interbank Offered Rate (“LIBOR”) and other interbank offered rates to alternative reference rates. The guidance was effective upon issuance and generally can be applied to applicable contract modifications through December 31, 2022. The Company is evaluating the impact of the transition from LIBOR to alternative reference rates but does not expect a significant impact to its Consolidated Financial Statements.

The Company reviewed all other recently issued accounting pronouncements and concluded that they were either not applicable or not expected to have a significant impact to its Consolidated Financial Statements.

(2) Property, Plant and Equipment

Property, plant and equipment at December 31, 2021 and 2020 consist of the following:

	2021	2020	Estimated useful lives
Land	\$ 2,756	\$ 2,756	
Buildings and improvements	19,844	19,786	10 to 30 years
Machinery and equipment	132,159	124,199	3 to 15 years
Office furniture, fixtures and equipment	10,094	7,403	3 to 10 years
Automotive equipment	1,832	1,747	3 to 6 years
Construction in progress	8,199	10,392	
Total gross value	174,884	166,283	
Less accumulated depreciation	(108,773)	(100,901)	
Total net value	<u>\$ 66,111</u>	<u>\$ 65,382</u>	

For the years ended December 31, 2021, 2020, and 2019, the Company's aggregate depreciation expense related to property, plant and equipment was \$8,530, \$7,466, and \$6,504, respectively. For the years ended December 31, 2021, 2020, and 2019, the Company eliminated from assets and accumulated depreciation \$658, \$1,400 and \$868 of fully depreciated assets, respectively.

(3) Long-Term Debt

Long-term debt of the Company at December 31, 2021 and 2020 is summarized as follows:

	2021	2020
Revolving line of credit	\$ 53,300	\$ 107,900
Less debt issuance costs	(1,060)	(458)
	<u>\$ 52,240</u>	<u>\$ 107,442</u>

Principal payments on long-term debt at December 31, 2021 of \$53,300 are due in August 2026.

The Company's main bank is Bank of the West, a wholly owned subsidiary of the French bank, BNP Paribas. Bank of the West has been the Company's bank for more than 30 years and is the syndication manager for the Company's loans.

The Company and certain of its affiliates are parties to a revolving line of credit agreement entitled the "Third Amended and Restated Loan and Security Agreement" dated as of August 5, 2021 (the "Credit Agreement"), which is a senior secured lending facility among AMVAC, the Company's principal operating subsidiary, as Borrower Agent (including the Company and AMVAC BV), as Borrowers, on the one hand, and a group of commercial lenders led by Bank of the West as administrative agent, documentation agent, syndication agent, collateral agent, sole lead arranger and book runner, on the other hand. The Credit Agreement consists of a line of credit of up to \$275,000, an accordion feature of up to \$150,000, a letter of credit and swingline sub-facility (each having limits of \$25,000) and has a maturity date of August 5, 2026. The Credit Agreement amends and restates the previous credit facility, which had a maturity date of June 30, 2022. With respect to key financial covenants, the Credit Agreement contains two: namely, borrowers are required to maintain a Total Leverage ("TL") Ratio of no more than 3.5-to-1, during the first three years, stepping down to 3.25-to-1 as of September 30, 2024, and a Fixed Charge Coverage Ratio of at least 1.25-to-1. In addition, to the extent that it completes acquisitions totaling \$15 million or more in any 90-day period, AMVAC may step-up the TL Ratio by 0.5-to-1, not to exceed 4.00-to-1, for the next three full consecutive quarters. Acquisitions below \$50 million no longer require Agent consent. Distributions to the Company's shareholders are limited to net income for the four fiscal quarter period ending on the fiscal quarter immediately prior to the fiscal quarter in which the current distribution was declared.

The Company's borrowing capacity varies with its financial performance, measured in terms of Consolidated EBITDA as defined in the Credit Agreement, for the trailing twelve-month period. Under the Credit Agreement, revolving loans bear interest at a variable rate based, at borrower's election with proper notice, on either (i) LIBOR plus the "Applicable Margin" which is based upon the Total Leverage ("TL") Ratio ("LIBOR Revolver Loan") or (ii) the greater of (x) the Prime Rate, (y) the Federal Funds Rate plus 0.5%, and (z) the Daily One-Month LIBOR Rate plus 1.00%, plus, in the case of (x), (y) or (z) the Applicable Margin ("Adjusted Base Rate Revolver Loan"). Interest payments for LIBOR Revolver Loans are payable on the last day of each interest period (either one-, three- or six- months, as selected by the borrower) and the maturity date, while interest payments for Adjusted Base Rate Revolver Loans are payable on the last business day of each month and the maturity date. The interest rate on December 31, 2021, was 1.98%.

At December 31, 2021, according to the terms of the Credit Agreement, as amended, and based on our performance against the most restrictive covenant listed above, the Company had the availability to increase its borrowings by up to \$178,705. This compares to an available borrowing availability of \$86,736 as of December 31, 2020. The level of borrowing capacity is driven by three factors: (1) our financial performance, as measured in EBITDA for trailing twelve-month period, (2) the inclusion of proforma EBITDA related to acquisitions completed during the preceding twelve months and (3) the leverage covenant (being the number of times EBITDA the Company may borrow under its credit facility agreement). The Company was in compliance with all the debt covenants as of December 31, 2021.

Substantially all the Company's assets are pledged as collateral under the Credit Agreement, as amended.

(4) Income Taxes

The provisions for income taxes are:

	2021	2020	2019
Current:			
Federal	\$ 6,684	\$ (1,197)	\$ (235)
State	2,149	(3)	(151)
Foreign	1,106	2,831	2,956
Deferred:			
Federal	(2,369)	2,177	2,867
State	(1,039)	403	1,548
Foreign	1,635	(1,131)	(1,783)
Total	<u>\$ 8,166</u>	<u>\$ 3,080</u>	<u>\$ 5,202</u>

Total income tax expense differed from the amounts computed by applying the U.S. Federal income tax rate of 21.0% to income before income tax expense, as a result of the following:

	2021	2020	2019
Computed tax expense at statutory federal rates	\$ 5,619	\$ 3,874	\$ 3,993
Increase (decrease) in taxes resulting from:			
State taxes, net of federal income tax benefit	1,485	559	1,131
Unrecognized tax benefits	(1,783)	(2,092)	263
Bargain purchase gain on business acquisition	(35)	(978)	—
Income tax credits	(1,206)	(812)	(819)
Foreign tax rate differential	262	2,145	341
Stock based compensation	208	377	366
Global intangible low-taxed income	162	—	249
Change in valuation allowance	3,304	—	—
Other	150	7	(322)
Total	<u>\$ 8,166</u>	<u>\$ 3,080</u>	<u>\$ 5,202</u>

Income before provision for income taxes and losses on equity investments are:

	2021	2020	2019
Domestic	\$ 21,212	\$ 11,858	\$ 15,465
International	5,929	6,589	3,547
Total	<u>\$ 27,141</u>	<u>\$ 18,447</u>	<u>\$ 19,012</u>

Temporary differences between the consolidated financial statements' carrying amounts and tax bases of assets and liabilities that give rise to significant portions of the net deferred tax liability at December 31, 2021 and 2020 relate to the following:

	2021	2020
Deferred tax asset		
Inventories	\$ 1,777	\$ 1,416
Program accrual	9,098	7,306
Vacation pay accrual	792	815
Accrued bonuses	1,250	589
Bad debt expense	1,361	952
Stock compensation	1,532	2,079
Domestic NOL carryforward	675	708
Foreign NOL carryforward	1,718	1,434
Tax credits	807	931
Lease liability	6,718	3,378
Accrued expenses	723	347
Unrealized foreign exchange loss	3,847	2,798
Other	744	735
Deferred tax asset	\$ 31,042	\$ 23,488
Less valuation allowance	(4,262)	—
Deferred tax asset, net	\$ 26,780	\$ 23,488
Deferred tax liability		
Plant and equipment, principally due to differences in depreciation and capitalized interest	\$ 37,113	\$ 36,878
Lease assets	6,600	3,332
Prepaid expenses	1,666	1,508
Deferred revenue	1,014	874
Other	123	1,692
Deferred tax liability	\$ 46,516	\$ 44,284
Total net deferred tax liability	<u>\$ 19,736</u>	<u>\$ 20,796</u>

As of December 31, 2021, we recorded a full valuation allowance against the net deferred income tax assets related to the Company's operations in Brazil totaling \$4,262, of which \$3,304 is included in the provision for income taxes for 2021 and \$958 related to unrealized foreign exchange losses for 2021 included in other comprehensive income for 2021. There was no valuation allowance as of December 31, 2020.

Gross foreign NOLs were \$5,491 and \$5,021 for the year ended December 31, 2021 and 2020, respectively. Substantially all of the Company's foreign NOLs can be carried forward indefinitely.

Gross federal and state NOLs available across all jurisdictions in which we operate were \$3,733 and \$3,994 as of December 31, 2021 and 2020, respectively. The Company's federal and state NOLs expire over varying intervals in the future.

The following is a roll-forward of the Company's total gross unrecognized tax benefits, not including interest and penalties, for the years ended December 31, 2021 and 2020 included in other liabilities, excluding current installments on the Company's consolidated balance sheets:

	2021	2020
Balance at beginning of year	\$ 3,222	\$ 4,395
Additions for tax positions related to the current year	223	159
Additions for tax positions related to the prior years	56	16
Reduction for tax positions related to the prior years	(971)	(841)
Effect of exchange rate changes	(104)	(507)
Balance at end of year	<u>\$ 2,426</u>	<u>\$ 3,222</u>

The Company recognizes accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes in the Company's consolidated financial statements. For the years ended December 31, 2021, 2020, and 2019 the Company had recognized a balance of approximately \$2,909, \$4,195, and \$6,528 respectively in interest and penalties related to unrecognized tax benefits.

It is expected that the amount of unrecognized tax benefits will change and \$1,699 of unrecognized tax benefits is expected to be released within the next twelve months due to expiration of statute of limitations.

The Company believes it is more likely than not that the deferred tax assets detailed in the table above, exclusive of those in Brazil with the previously mentioned full valuation allowance, will be realized in the normal course of business. It is the intent of the Company that undistributed earnings of foreign subsidiaries are permanently reinvested. The amount of undistributed earnings was \$12,741 as of December 31, 2021. Upon distribution of earnings in the form of dividends or otherwise, the Company may still be subject to state income taxes and withholding taxes payable to the various foreign countries. Determination of the unrecognized deferred tax liability is not practical due to the complexities of a hypothetical calculation.

The Company is subject to U.S. federal income tax as well as to income tax in multiple state jurisdictions. Federal income tax returns of the Company are subject to Internal Revenue Service ("IRS") examination for the 2018 through 2020 tax years. State income tax returns are subject to examination for the 2017 through 2020 tax years. The Company has foreign income tax returns subject to examination.

The Mississippi Department of Revenue has completed its audit of the Company's state income tax returns for the years ended December 31, 2016 through December 31, 2018. The proposed adjustment for the period is immaterial.

On November 9, 2018, the Company completed the purchase of all the outstanding shares of TyraTech, Inc., a loss corporation. The Company obtained approximately \$3,971 of usable federal net operating losses through the acquisition. The Internal Revenue Code of 1986, as amended, imposes restrictions on the utilization of NOLs in the event of an "ownership change" of a corporation. During 2019, the Company completed the Section 382 analysis and determined that the utilization of the losses is subject to an annual limitation of \$162, with an additional \$890 of net operating losses available over the first five years after the ownership change.

On October 2, 2020, the Company completed the acquisition of all outstanding stock of the Agrinos Group Companies (Agrinos), except for Agrinos AS. Agrinos has operating entities in the U.S., Mexico, India, Brazil, China, Ukraine, and Spain. Agrinos, Inc., an U.S. corporation with operating losses. The Company obtained approximately \$126 of usable federal net operating losses through the acquisition. The Internal Revenue Code of 1986, as amended, imposes restrictions on the utilization of NOLs in the event of an "ownership change" of a corporation. During 2021, the Company completed an analysis and determined that the potential annual limitation on the Company's utilization of the losses is insignificant.

(5) Litigation and Environmental

The Company records a liability in its consolidated financial statements for loss contingencies when a loss is known or considered probable, and the amount can be reasonably estimated. When determining the estimated loss or range of loss, significant judgment is required to estimate the amount and timing of a loss to be recorded. The Company recognizes legal expense in connection with loss contingencies as incurred.

A. DBCP Cases

Over the course of the past 30 years, AMVAC and/or the Company have been named or otherwise implicated in a number of lawsuits concerning injuries allegedly arising from either contamination of water supplies or personal exposure to 1, 2-dibromo-3-chloropropane ("DBCP®"). DBCP was manufactured by several chemical companies, including Dow Chemical Company, Shell Oil Company and AMVAC, and was approved by the USEPA to control nematodes. DBCP was also applied on banana farms in Latin America. The USEPA suspended registrations of DBCP in October 1979, except for use on pineapples in Hawaii. That suspension was partially based on 1977 studies by other manufacturers that indicated a possible link between male fertility and exposure to DBCP among their factory production workers involved with producing the product. The Company has not sold DBCP in over 40 years.

At present, there are four domestic lawsuits and approximately 85 Nicaraguan lawsuits filed by former banana workers in which AMVAC has been named as a party. Only two of the Nicaraguan actions have actually been served on AMVAC. With respect to Nicaraguan matters, there was no change in status during 2021. As described more fully below, activity in domestic cases during 2021 is as follows. The two cases remaining in Delaware include 287 plaintiffs who have appealed a lower court finding that the matter was barred by the statute of limitations; this matter has been remanded to the trial court, following a ruling by the Delaware Supreme Court on recognizing the doctrine of cross-jurisdictional tolling. In Hawaii, in the matter of *Patrickson, et. al. v. Dole Food Company*, the parties have stipulated that the Company shall be dismissed, insofar as it was not a party to the class action case that tolled the statute of limitations. In *Adams* (also in Hawai'i), there has been no activity since 2014, when the court granted dismissal of co-defendant Dole on the basis of a worker's compensation bar and gave plaintiffs leave to amend their complaint in light of that ruling.

Nicaraguan Matters

A review of court filings in Chinandega, Nicaragua, has found 85 suits alleging personal injury allegedly due to exposure to DBCP and involving approximately 3,592 plaintiffs have been filed against AMVAC and other parties. Of these cases, only two – *Flavio Apolinar Castillo et al. v. AMVAC et al.*, No. 535/04 and *Luis Cristobal Martinez Suazo et al. v. AMVAC et al.*, No. 679/04 (which were filed in 2004 and involve 15 banana workers) – have been served on AMVAC. All but one of the suits in Nicaragua have been filed pursuant to Special Law 364, an October 2000 Nicaraguan statute that contains substantive and procedural provisions that Nicaragua's Attorney General previously expressed as unconstitutional. Each of the Nicaraguan plaintiffs' claims \$1 million in compensatory damages and \$5 million in punitive damages. In all these cases, AMVAC is a joint defendant with Dow Chemical Company and Dole Food Company, Inc. AMVAC contends that the Nicaragua courts do not have jurisdiction over it and that Public Law 364 violates international due process of law. AMVAC has objected to personal jurisdiction and demanded under Law 364 that the claims be litigated in the U.S.. In 2007, the court denied these objections, and AMVAC appealed the denial. It is not presently known as to how many of these plaintiffs claim exposure to DBCP at the time AMVAC's product was allegedly used nor is there any verification of the claimed injuries. Further, to date, plaintiffs have not had success in enforcing Nicaraguan judgments against domestic companies before U.S. courts. With respect to these Nicaraguan matters, AMVAC intends to defend any claim vigorously. Furthermore, the Company does not believe that a loss is either probable or reasonably estimable and has not recorded a loss contingency for these matters. There were no changes in connection with these matters in 2021.

Delaware DBCP Cases

Chavez. On or about May 31, 2012, HendlerLaw, P.C. filed several actions involving claims for personal injury allegedly arising from exposure to DBCP on behalf of 230 banana workers from Costa Rica, Ecuador and Panama. Defendant Dole subsequently brought a motion to dismiss these matters under the "first-to-file" theory of jurisdiction, specifically in light of the fact that they involved identical claims and claimants as matters that had been brought by the same law firm in Louisiana. These Delaware matters were consolidated into one matter ("Chavez"). On August 21, 2012, the U.S. District Court granted defendants' motion to dismiss the actions with prejudice, finding that the same claimants and claims had been pending in the Hendler-Louisiana cases where they had been first filed. However, plaintiffs appealed the dismissal, and on September 2, 2016, the Third Circuit Court reversed the District Court decision, finding that it was not proper for the trial court to have dismissed these cases with prejudice even though the Louisiana courts had dismissed the same claims for expiration of the statute of limitations. In reaching its decision, the Third Circuit reasoned that no court had yet addressed the merits of the matter, that Delaware's statute of limitations may differ from that of Louisiana, and that it would have been proper for the Delaware trial court to have dismissed the matter without prejudice (that is, with the right to amend and refile). Accordingly, Chavez was remanded to the U.S. District Court in Delaware on September 2, 2016, where it remained until it was stayed in June 2017 (as indicated in "Marquinez" below) and subsequently reactivated in March 2018.

Abad Castillo and Marquinez. On or about May 31, 2012, two cases (captioned Abad Castillo and Marquinez) were filed with the U.S. District Court for the District of Delaware (USDC DE No. 1:12-CV-00695-LPS) involving claims for physical injury arising from alleged exposure to DBCP over the course of the late 1960's through the mid-1980's on behalf of 2,700 banana plantation workers from Costa Rica, Ecuador, Guatemala, and Panama. Defendant Dole brought a motion to dismiss 22 plaintiffs from Abad Castillo on the ground that they were parties in cases that had been filed by HendlerLaw P.C. in Louisiana. On September 19, 2013, the appeals court granted, in part, and denied, in part, the motion to dismiss, holding that 14 of the 22 plaintiffs should be dismissed. On May 27, 2014, the district court granted Dole's motion to dismiss the matter without prejudice on the ground that the applicable statute of limitations had expired in 1995. Then, on August 5, 2014, the parties stipulated to summary judgment in favor of defendants (on the same ground as the earlier motion) and the court entered judgment in the matter. Plaintiffs were given an opportunity to appeal; however, only 57 of the 2,700 actually entered an appeal. Thus, only 57 plaintiffs remain in Marquinez.

On or about June 18, 2017, the Third Circuit Court submitted a certified question of law to the Delaware Supreme Court on the question of when the tolling period ended. At that time, as mentioned above, the Chavez case was stayed, pending the ruling of the state's highest court. The Delaware Supreme Court heard oral argument on January 17, 2018 and, on March 15, 2018, ruled on the matter, finding that federal court dismissal in 1995 on the grounds of forum non conveniens did not end class action tolling, and that such tolling ended when class action certification was denied in Texas state court in June 2010. Thus, both Marquez and Chavez are now pending at the district court, following the appeals court's ruling. Discovery has commenced, and the court is considering proposed schedules for completing discovery over the next 12-24 months. At this stage, defendants have identified multiple claimants whose medical examinations disqualify them from discovery. Plaintiffs seek to complete a limited number of medical examinations in each country in order to enable a representative subgroup of claimants to proceed with the litigation, while defendants seek to complete all medical examinations before proceeding. At this stage in the proceedings, the Company does not believe that a loss is probable or reasonably estimable for either Chavez or Marquez and has not recorded a loss contingency for these matters.

Hawaiian DBCP Matters

Patrickson, et. al. v. Dole Food Company, et al. In October 1997, AMVAC was served with two complaints in which it was named as a defendant, filed in the Circuit Court, First Circuit, State of Hawai'i and in the Circuit Court of the Second Circuit, State of Hawai'i (two identical suits) entitled Patrickson, et. al. v. Dole Food Company, et. al ("Patrickson Case") alleging damages sustained from injuries (including sterility) to banana workers caused by plaintiffs' exposure to DBCP while applying the product in their native countries. Other named defendants include Dole Food Company, Shell Oil Company and Dow Chemical Company. After several years of law and motion activity, the court granted judgment in favor of the defendants based upon the statute of limitations on July 28, 2010. On August 24, 2010, the plaintiffs filed a notice of appeal. On April 8, 2011, counsel for plaintiffs filed a pleading to withdraw and to substitute new counsel. On October 21, 2015, the Hawai'i Supreme Court granted the appeal and overturned the lower court decision, ruling that the State of Hawai'i now recognizes cross-jurisdictional tolling, that plaintiffs filed their complaint within the applicable statute of limitations and that the matter is to be remanded to the lower court for further adjudication. However, in November 2018, the parties stipulated that, because it was not named as a defendant in the Carcamo matter (class action matter that gave rise to the tolling of the statute of limitations), AMVAC should be dismissed from this matter. Thus, we expect that the Company will be dismissed with prejudice from this action as soon as the court issues an order, and accordingly have not recorded a loss contingency in connection therewith. There were no changes in this matter during 2021.

Adams v. Dole Food Company et al. On approximately November 23, 2007, AMVAC was served with a suit filed by two former Hawaiian pineapple workers (and their spouses), alleging that they had testicular cancer due to DBCP exposure; the action is captioned Adams v. Dole Food Company et al in the First Circuit for the State of Hawaii. Plaintiff alleges that they were exposed to DBCP between 1971 and 1975. AMVAC denies that any of its product could have been used at the times and locations alleged by these plaintiffs. Following the dismissal of Dole Food Company on the basis of the exclusive remedy of worker's compensation benefits, plaintiffs appealed the dismissal. The court of appeals subsequently remanded the matter to the lower court in February 2014, effectively permitting plaintiffs to amend their complaint to circumvent the workers' compensation bar. There has been no activity in the case since that time. The Company does not believe that a loss is either probable or reasonably estimable and has not recorded a loss contingency for this matter. There were no changes in connection with this matter in 2021.

Other Matters

EPA FIFRA/RCRA Matter. On November 10, 2016, the Company was served with a grand jury subpoena from the United States Attorney's Office for the Southern District of Alabama, seeking documents regarding the importation, transportation, and management of a specific pesticide in substantially empty, closed containers. The Company retained defense counsel to assist in responding to the subpoena and otherwise defending the Company's interests. AMVAC is co-operating in the investigation.

Since April 2018, the Department of Justice ("DOJ") has conducted several interviews of AMVAC employees and issued supplemental document requests in connection with the investigation. In November 2020, DOJ issued a second grand jury subpoena seeking records and related communications with regard to a submission made by the Company to the Environmental Protection Agency ("EPA") in connection with a request to amend a pesticide's registration. Soon thereafter, DOJ also identified the Company and one of its non-executive employees as targets of the government's investigation. In January 2021, DOJ and EPA informed the Company that it is investigating violations of two environmental statutes, the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA") and the Resource Conservation and Recovery Act ("RCRA"), as well as obstruction of an agency proceeding and false statement statutes. DOJ also identified for the Company, as well as for the individual target, evidence that it contends supports alleged violations with respect to both the Company and the individual target. As part of discussions regarding possible resolution, in October 2021, the Company presented its evaluation of the legal and factual issues raised by the government (which do not include any allegations of harm to human health or the environment) to both DOJ and USEPA. Further, three corporate witnesses were called to be interviewed by the grand jury in Mobile, Alabama in February 2022.

The governmental agencies involved in this investigation have a range of civil and criminal penalties they may seek to impose against corporations and individuals for violations of FIFRA, RCRA and other federal statutes including, but not limited to, injunctive relief, fines, penalties and modifications to business practices and compliance programs, including the appointment of a monitor. If violations are established, the amount of any fines or monetary penalties which could be assessed and the scope of possible non-monetary relief would depend on, among other factors, findings regarding the amount, timing, nature and scope of the violations, and the level of cooperation provided to the governmental authorities during the investigation. As a result, the Company cannot yet anticipate the timing or predict the ultimate resolution of this investigation, financial or otherwise, which could have a material adverse effect on our business prospects, operations, financial condition, and cash flows. Accordingly, we have not recorded a loss contingency for this matter.

Harold Reed v. AMVAC et al. During January 2017, the Company was served with two Statements of Claim that had been filed on March 29, 2016 with the Court of Queen's Bench of Alberta, Canada (as case numbers 160600211 and 160600237) in which plaintiffs Harold Reed (an applicator) and 819596 Alberta Ltd. dba Jem Holdings (an application equipment rental company) allege physical injury and damage to equipment, respectively, arising from a fire that occurred during an application of the Company's potato sprout inhibitor, SmartBlock, at a potato storage facility in Coaldale, Alberta on April 2, 2014. Four other related matters were subsequently consolidated into this case (alleging loss of potatoes, damage to equipment, damage to Quonset huts and loss of business income). The parties have exchanged written discovery, and depositions of persons most knowledgeable took place during the first quarter of 2019. Citing the length of the cases' pendency and the expense, in December 2019, plaintiff Reed voluntarily dismissed two actions (160600211 and 160600237) for no consideration. Over the course of 2020, discovery was completed, and the parties held a mediation on March 11, 2021; however, no settlement was reached. Thus, pre-trial discovery will likely continue. The Company believes that it is not primarily at risk but that a loss is probable and reasonably estimable and, to that end, has recorded a loss contingency in an amount that is not material to its financial performance or operations cash flows.

Pitre etc. v. Agrocentre Ladauniere et al. On February 11, 2022, a strawberry grower named Les Entreprises Pitre, Inc. filed a complaint in the Superior Court, District of Labelle, Province of Quebec, Canada, entitled *Pitre, etc. v. Agrocentre Ladauniere, Inc. et al. including Amvac Chemical Corporation*, seeking damages in the amount of approximately \$5 million arising from stunted growth of, and reduced yield from, its strawberry crop allegedly from the application of AMVAC's soil fumigant, Vapam, in spring of 2021. Plaintiff alleges that its application consultant's advice was, in effect, incomplete and misleading (in light of the product's label) and, further, that the language of the product label was insufficient to warn the user about the proper time interval between application and planting of seedling plants. The Company believes that the claims have no merit and intends to defend the matter. At this stage in the proceedings, there is no sufficient information to form a judgment as to either the probability or amount of loss; thus, the Company has not set aside a reserve in connection with this matter.

(6) Employee Deferred Compensation Plan and Employee Stock Purchase Plan

The Company maintains a deferred compensation plan ("the Plan") for all eligible employees. The Plan calls for each eligible employee, at the employee's election, to participate in an income deferral arrangement under Internal Revenue Code Section 401(k). The plan allows eligible employees to make contributions, which cannot exceed 100% of compensation, or the annual dollar limit set by the Internal Revenue Code. The Company matches the first 5% of employee contributions. The Company's contributions to the Plan amounted to \$2,273, \$2,172 and \$1,997 in 2021, 2020 and 2019, respectively.

During 2001, the Company's Board of Directors adopted the AVD Employee Stock Purchase Plan (the "ESPP Plan"). The Plan allows eligible employees to purchase shares of common stock through payroll deductions at a discounted price. An original aggregate number of approximately 1,000,000 shares of the Company's Common Stock, par value \$0.10 per share (subject to adjustment for any stock dividend, stock split or other relevant changes in the Company's capitalization) were allowed to be sold pursuant to the Plan, which is intended to qualify under Section 423 of the Internal Revenue Code. The Plan allows for purchases in a series of offering periods, each six months in duration, with new offering periods (other than the initial offering period) commencing on January 1 and July 1 of each year. The initial offering period commenced on July 1, 2001. Pursuant to action taken by the Company's Board of Directors on December 10, 2010, the expiration of the Plan was extended to December 31, 2013. The Plan was amended and restated on June 30, 2011, following stockholders' ratification of the extended expiration date. The Plan was amended as of June 6, 2018, following stockholders' ratification of a ten-year extension to the expiration date (which now stands at December 31, 2028). Under the Plan, as amended as of June 6, 2018, 995,000 shares of the Company's common stock were authorized. As of December 31, 2021, 2020, and 2019, 543,180, 593,962, and 643,630 shares, respectively, remained available under the plan. The expense recognized under the Plan was immaterial during the years ended December 31, 2021, 2020 and 2019, respectively.

Shares of common stock purchased through the Plan in 2021, 2020 and 2019 were 50,782, 49,668 and 47,229, respectively.

(7) Major Customers and International Sales

In 2021, there were three customers that accounted for 17%, 14% and 8%, respectively, of the Company's consolidated sales. In 2020, there were three customers that accounted for 17%, 12%, and 10% of the Company's consolidated sales. In 2019, there were three customers that accounted for 18%, 14% and 7% of the Company's consolidated sales.

The Company primarily sells its products to distributors, buying cooperatives, other co-operative groups and, in certain territories, end users, and extends credit based on an evaluation of the customer's financial condition. The Company had three significant customers who each accounted for approximately 11%, 4% and 4% of the Company's receivables as of December 31, 2021. The Company had three significant customers who each accounted for approximately 8%, 4% and 3% of the Company's receivables as of December 31, 2020. The Company has long-standing relationships with its customers and the Company considers its overall credit risk for accounts receivables to be moderate.

International sales for 2021, 2020 and 2019 were as follows:

	2021	2020	2019
South and Central America	\$ 108,975	\$ 102,281	\$ 111,106
Mexico	40,724	33,517	28,835
Asia	26,234	19,290	15,554
Australia	20,257	9,902	2,798
Canada	10,377	10,572	11,637
Africa	3,468	6,072	6,750
Middle East	2,357	3,054	2,392
Europe	2,243	2,292	6,889
Total international net sales	<u>\$ 214,635</u>	<u>\$ 186,980</u>	<u>\$ 185,961</u>

(8) Product and Business Acquisitions

The Company completed one product acquisition during the year ended December 31, 2021. The acquisition was completed on July 1, 2021, for \$10,000 in cash consideration. The acquisition was accounted for as an asset acquisition and the \$10,000 in consideration was allocated as follows: product registrations and product rights \$8,225, trade names and trademarks \$1,650, and prepaid asset \$125.

During the year ended December 31, 2020, the Company completed two acquisitions:

On October 2, 2020, the Company completed the acquisition of all outstanding stock of the Agrinos Group Companies (Agrinos), except for Agrinos AS. Agrinos has operating entities in the U.S., Mexico, India, Brazil, China, Ukraine, and Spain. Agrinos is a fully integrated biological input supplier with proprietary technology, internal manufacturing, and global distribution capabilities. At closing, the Company paid cash consideration of \$3,125, which was net of cash acquired of \$1,813. The acquisition was accounted for as a business combination and resulted in a bargain gain. The purchase consideration was allocated as follows:

	Preliminary Allocation at December 31, 2020	Adjustments to Fair Value recorded in 2021	Final Allocation
Trade receivables	\$ 2,358	\$ (81)	\$ 2,277
Inventory and other current assets	5,133	238	5,371
Property, plant, and equipment	5,004	137	5,141
Product registrations and product rights	250	(200)	50
Liabilities assumed	(4,963)	77	(4,886)
Bargain	(4,657)	(171)	(4,828)
Total	<u>\$ 3,125</u>	<u>\$ —</u>	<u>\$ 3,125</u>

Agrinos was acquired out of bankruptcy. This provided the Company with an opportunity to acquire Agrinos at an advantageous purchase price which was below the fair value of Agrinos' net assets acquired, resulting in the above-mentioned bargain purchase gain. The liabilities assumed include liabilities of \$407 related to income tax matters.

On October 8, 2020, the Company completed the acquisition of all outstanding stock of AgNova Technologies Pty Ltd (“AgNova”). AgNova is an Australian entity that sources, develops, and distributes specialty crop protection and production solutions for agricultural and horticultural producers, and for selected non-crop users. The purchase price consideration was as follows:

	Preliminary Consideration at December 31, 2020	Adjustments to Consideration recorded in 2021	Final Consideration
Cash	\$ 16,997	\$ —	\$ 16,997
Less cash acquired	(157)	—	(157)
Contingent consideration	2,007	(955)	1,052
Total consideration	\$ 18,847	\$ (955)	\$ 17,892

The fair value of the contingent consideration was estimated using a Monte Carlo Simulation. The acquisition was accounted for as a business combination and the purchase consideration was allocated as follows:

	Preliminary Allocation at December 31, 2020	Adjustments to Fair Value recorded in 2021	Final Allocation
Trade receivables	\$ 1,508	\$ —	\$ 1,508
Inventory and other current assets	5,698	—	5,698
Property, plant, and equipment	73	—	73
Product registrations and product rights	6,395	1,932	8,327
Trade names and trademarks	1,195	(844)	351
Distribution agreements	—	3,584	3,584
Customer relationships and customer lists	632	(246)	386
Goodwill	8,672	(4,054)	4,618
Liabilities assumed	(5,326)	(1,327)	(6,653)
Total consideration	\$ 18,847	\$ (955)	\$ 17,892

The liabilities assumed include liabilities of \$3,857 related to income tax matters.

During the year ended December 31, 2019, the Company completed three acquisitions:

On January 10, 2019, the Company completed the acquisition of all outstanding shares of stock of two affiliated businesses, Agrovant and Defensive (subsequently merged to form AMVAC 3p), which are located in Jaboticabal in the state of Sao Paul, Brazil. At closing the Company paid cash consideration of \$20,679, which was net of cash acquired of \$981, deferred consideration of \$3,051 including contingent consideration dependent on certain financial results for 2019, and liabilities assumed of \$18,160, including liabilities of \$9,111 related to income tax matters. These companies were founded in 2000 and are suppliers of crop protection products and micronutrients with focus on the fruit and vegetable market segments. The acquisition was accounted for as a business combination and the total asset value of \$41,890 was allocated as follows: trade name \$1,010, customer relationships \$5,705, goodwill \$22,652, working capital and fixed assets \$9,139 and indemnification assets \$3,384. The operating results of the acquired businesses are included in our consolidated statement of operations from the date of acquisition. The goodwill recognized is expected to be deductible for income tax purposes, subject to merging AMVAC do Brasil with AMVAC 3p.

The two other acquisitions completed in 2019 related to product lines which were purchased for a total cash consideration at closing of \$17,307, including transaction costs of \$14. In addition, the Company assumed liabilities in the amount of \$1,707. These acquisitions were accounted for as asset acquisitions because the Company did not acquire any substantive processes. The acquired assets consist of product rights \$13,279, trade names \$4,442, and inventory \$1,293.

Cash paid at closing for the asset acquisitions and business combinations was funded through our revolving line of credit. Pro-forma financial information is not included herein as the pro-forma impact of the acquisitions is not material.

(9) Intangible Assets and Goodwill

The following schedule represents intangible assets recognized in connection with product acquisitions (See Note 1 for the Company's accounting policy regarding intangible assets):

	Amount
Intangible assets at December 31, 2018	\$ 186,467
Additions during fiscal 2019	25,368
Write offs	(264)
Impact of movement in exchange rates	(1,158)
Amortization expense	(12,152)
Intangible assets at December 31, 2019	198,261
Additions during fiscal 2020	12,675
Write offs	(41)
Impact of movement in exchange rates	(637)
Amortization expense	(12,744)
Intangible assets at December 31, 2020	<u>\$ 197,514</u>
Additions during fiscal 2021	10,524
Measurement period adjustment	4,226
Impact of movement in exchange rates	(710)
Amortization expense	(13,713)
Intangible assets at December 31, 2021	<u>\$ 197,841</u>
Goodwill at December 31, 2018	\$ 25,906
Additions during fiscal 2019	22,652
Impact of movement in exchange rates	(1,885)
Goodwill at December 31, 2019	46,673
Additions during fiscal 2020	8,830
Other	617
Impact of movement in exchange rates	(4,012)
Goodwill at December 31, 2020	52,108
Measurement period adjustment	(4,054)
Impact of movement in exchange rates	(1,794)
Goodwill at December 31, 2021	<u>\$ 46,260</u>
Intangible assets and goodwill at December 31, 2021	<u>\$ 244,101</u>

The following schedule represents the gross carrying amount and accumulated amortization of intangible assets and goodwill. Product rights and trademarks are amortized over their expected useful lives of 25 years. Customer lists are amortized over their expected useful lives of nine to ten years.

	2021			2020		
	Gross	Accumulated Amortization	Net Book Value	Gross	Accumulated Amortization	Net Book Value
Product Rights	\$ 271,632	\$ 110,090	\$ 161,542	\$ 260,393	\$ 99,228	\$ 161,165
Trademarks	40,578	9,870	30,708	37,335	8,111	29,224
Customer Lists	10,966	5,375	5,591	11,539	4,414	7,125
Total intangibles assets	323,176	125,335	197,841	309,267	111,753	197,514
Goodwill	46,260	—	46,260	52,108	—	52,108
Total intangibles and goodwill	<u>\$ 369,436</u>	<u>\$ 125,335</u>	<u>\$ 244,101</u>	<u>\$ 361,375</u>	<u>\$ 111,753</u>	<u>\$ 249,622</u>

The following schedule represents future amortization charges related to intangible assets:

Year ending December 31,	Amount
2022	\$ 13,878
2023	13,369
2024	12,963
2025	12,675
2026	12,531
Thereafter	132,425
	<u>\$ 197,841</u>

(10) Contingent Consideration

The following schedule represents the Company's contingent consideration liability under acquisitions agreements:

	Amount
Obligations under acquisition agreements at December 31, 2018	\$ 3,866
Additional obligations acquired	1,312
Fair value adjustment	(3,866)
Accretion of discounted liabilities	28
Foreign exchange effect	(96)
Obligations under acquisition agreements at December 31, 2019	1,244
Additional obligations acquired	2,044
Fair value adjustment	250
Accretion of discounted liabilities	16
Payments on existing obligations	(1,227)
Foreign exchange effect	141
Obligations under acquisition agreements at December 31, 2020	2,468
Purchase price adjustment	(955)
Fair value adjustment	758
Accretion of discounted liabilities	(8)
Payments on existing obligations	(1,301)
Foreign exchange effect	(176)
Obligations under acquisition agreements at December 31, 2021	<u>\$ 786</u>

Amounts of contingent consideration recognized in the consolidated balance sheets:

	December 31, 2021	December 31, 2020
Short-term	\$ 786	\$ 1,004
Long-term	-	1,464
Total contingent consideration	<u>\$ 786</u>	<u>\$ 2,468</u>

(11) Commitments

We enter into various obligations in the ordinary course of business, generally of a short-term nature. Those that are binding primarily relate to purchase commitments for inventory and orders submitted for equipment for our production plants as well as service agreements.

(12) Research and Development

Research and development expenses which are included in operating expenses were \$10,354, \$8,757 and \$8,906 for the years ended December 31, 2021, 2020 and 2019, respectively.

(13) Equity Plan Awards

Under the Company's Equity Incentive Plan of 1993, as amended ("the Plan"), all employees are eligible to receive non-assignable and non-transferable restricted stock, options to purchase common stock, and other forms of equity. As of December 31, 2021, the number of securities remaining available for future issuance under the Plan is 870,345.

The below tables illustrate the Company's stock-based compensation, unamortized stock-based compensation, and remaining weighted average period for the years ended December 31, 2021, 2020 and 2019. This projected expense will change if any stock options and restricted stock are granted or cancelled prior to the respective reporting periods, or if there are any changes required to be made for estimated forfeitures.

	Stock-Based Compensation	Unamortized Stock-Based Compensation	Remaining Weighted Average Period (years)
<u>December 31, 2021</u>			
Restricted Stock	\$ 5,682	\$ 6,804	1.8
Unrestricted Stock	421	187	0.4
Performance-Based Restricted Stock	777	2,888	1.8
Total	<u>\$ 6,880</u>	<u>\$ 9,879</u>	
<u>December 31, 2020</u>			
Restricted Stock	\$ 3,166	\$ 6,954	1.9
Unrestricted Stock	461	183	0.4
Performance-Based Restricted Stock	2,934	3,352	1.9
Total	<u>\$ 6,561</u>	<u>\$ 10,489</u>	
<u>December 31, 2019</u>			
Restricted Stock	\$ 3,655	\$ 5,512	1.3
Unrestricted Stock	411	205	0.4
Performance-Based Restricted Stock	3,094	2,835	1.9
Total	<u>\$ 7,160</u>	<u>\$ 8,552</u>	

The Company also granted stock options in past periods. All outstanding stock options are fully vested and exercisable and no expense was recorded during the years ended December 31, 2021, 2020 and 2019.

Restricted and Unrestricted Stock

A summary of nonvested restricted and unrestricted stock is presented below:

	<u>December 31, 2021</u>		<u>December 31, 2020</u>	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested shares at January 1 st	820,624	\$ 16.64	719,845	\$ 17.67
Granted	295,619	20.00	393,180	14.39
Vested	(244,651)	19.23	(255,835)	15.86
Forfeited	(54,302)	17.11	(36,566)	18.34
Nonvested shares at December 31 st	<u>817,290</u>	<u>\$ 17.04</u>	<u>820,624</u>	<u>\$ 16.64</u>

Performance-Based Restricted Stock

A summary of nonvested performance-based stock is presented below:

	December 31, 2021		December 31, 2020	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested shares at January 1 st	391,771	\$ 16.26	345,432	\$ 16.92
Granted	102,043	20.03	160,706	14.29
Additional granted based on performance achievement	71,180	20.53	76,445	16.56
Vested	(175,087)	19.78	(184,785)	15.87
Forfeited	(10,846)	16.89	(6,027)	17.52
Nonvested shares at December 31 st	<u>379,061</u>	<u>\$ 16.43</u>	<u>391,771</u>	<u>\$ 16.26</u>

Performance Based Restricted Stock Granted in 2021— During the year ended December 31, 2021, the Company issued a total of 102,043 performance-based shares to employees. The shares granted during 2021 have an average fair value of \$20.03. The fair value was determined by using the publicly traded share price as of the market close on the date of grant and Monte Carlo valuation method. The Company will recognize as expense the value of the performance-based shares over the required service period from grant date. The shares will cliff vest on April 16, 2024, with a measurement period commencing January 1, 2021, and ending December 31, 2023. Eighty percent of these performance-based shares are based upon the financial performance of the Company, specifically, an earnings before interest and tax (“EBIT”) goal weighted at 50% and a net sales goal weighted at 30%. The remaining 20% of performance-based shares are based upon AVD stock price appreciation over the same performance measurement period. The EBIT and net sales goals measure the relative growth of the Company’s EBIT and net sales for the performance measurement period, as compared to the median growth of EBIT and net sales for an identified peer group. The stockholder return goal measures the relative growth of the fair market value of the Company’s stock price over the performance measurement period, as compared to that of the Russell 2000 Index and the median fair market value of the common stock of the comparator companies, identified in the Company’s 2020 Proxy Statement. All parts of these awards vest in three years but are subject to reduction to a minimum (or even zero) for recording less than the targeted performance and to increase to a maximum of 200% for achieving in excess of the targeted performance.

Performance Based Restricted Stock Granted in 2020— During the year ended December 31, 2020, the Company issued a total of 160,706 performance-based shares to employees. The shares granted during 2020 have an average fair value of \$14.29. The fair value was determined by using the publicly traded share price as of the market close on the date of grant and Monte Carlo valuation method. The Company will recognize as expense the value of the performance-based shares over the required service period from grant date. The shares will cliff vest on May 13, 2023, with a measurement period commencing October 1, 2020, and ending March 31, 2023. Eighty percent of these performance-based shares are based upon the financial performance of the Company, specifically, an earnings before interest and tax (“EBIT”) goal weighted at 50% and a net sales goal weighted at 30%. The remaining 20% of performance-based shares are based upon AVD stock price appreciation over the same performance measurement period. The EBIT and net sales goals measure the relative growth of the Company’s EBIT and net sales for the performance measurement period, as compared to the median growth of EBIT and net sales for an identified peer group. The stockholder return goal measures the relative growth of the fair market value of the Company’s stock price over the performance measurement period, as compared to that of the Russell 2000 Index and the median fair market value of the common stock of the comparator companies, identified in the Company’s 2020 Proxy Statement. All parts of these awards vest in three years but are subject to reduction to a minimum (or even zero) for recording less than the targeted performance and to increase to a maximum of 200% for achieving in excess of the targeted performance.

Performance Based Restricted Stock Granted in 2019— During the year ended December 31, 2019, the Company issued a total of 137,557 performance-based shares to employees. The shares granted during 2019 have an average fair value of \$16.96. The fair value was determined by using the publicly traded share price as of the market close on the date of grant and Monte Carlo Valuation method. The Company will recognize as expense the value of the performance-based shares over the required service period from grant date. The shares will cliff vest on March 28, 2022, with a measurement period commencing January 1, 2019, and ending December 31, 2021. Eighty percent of these performance-based shares are based upon the financial performance of the Company, specifically, an earnings before income taxes (“EBIT”) goal weighted at 50% and a net sales goal weighted at 30%. The remaining 20% of performance-based shares are based upon AVD stock price appreciation over the same performance measurement period. The EBIT and net sales goals measure the relative growth of the Company’s EBIT and net sales for the performance measurement period, as compared to the median growth of EBIT and net sales for an identified peer group. The stockholder return goal measures the relative growth of the fair market value of the Company’s stock price over the performance measurement period, as compared to that of the Russell 2000 Index and the median fair market value of the common stock of the comparator companies, identified in the Company’s 2018 Proxy Statement. All parts of these awards vest in three years but are subject to reduction to a minimum (or even zero) for recording less than the targeted performance and to increase to a maximum of 200% for achieving in excess of the targeted performance.

In 2021, the Company assessed the likelihood of achieving the performance measures based on peer group information currently available for the performance-based shares granted in 2019. Based on the performance thus far, the Company has concluded that it is likely that the performance measure based on EBIT will not be met and net sales will be met at 200% of targeted performance and have recorded the related additional expense in 2021. The performance shares based on market price are expected to be met at 27% of targeted performance. The effect of market conditions for performance shares based on market are included in the grant date fair value valuation and no additional expenses were recognized in 2021.

During 2021, the Company concluded that the performance measure based on EBIT and net sales for the performance-based shares granted in 2018, when compared to the peer group, was both met at 200% of targeted performance and all related additional expenses were recorded as of December 31, 2021. The 2018 performance shares based on market price was met at 43%, however, the market condition is reflected in the grant date fair value valuation and no additional expenses were recognized. As a result, 71,180 additional shares were earned since the Company achieved performance targets when compared to the peer group.

Stock Options

Under the terms of the Company’s ISOP, under which options to purchase common stock can be issued, all employees are eligible to receive non-assignable and non-transferable options to purchase shares. The exercise price of any option may not be less than the fair market value of the shares on the date of grant; provided, however, that the exercise price of any option granted to an eligible employee owning more than 10% of the outstanding common stock may not be less than 110% of the fair market value of the shares underlying such option on the date of grant. No options granted may be exercisable more than ten years after the date of grant.

In 2021, 2020 and 2019, no options were granted.

Incentive Stock Option Plans

Activity of the incentive stock option plans:

	Number of Shares	Weighted Average Price Per Share
Balance outstanding, December 31, 2018	384,064	\$ 9.10
Options exercised	(51,241)	8.87
Balance outstanding, December 31, 2019	332,823	\$ 9.14
Options exercised	(196,736)	7.79
Options forfeited	(13,000)	7.50
Balance outstanding, December 31, 2020	123,087	\$ 11.48
Options exercised	(15,051)	11.41
Balance outstanding, December 31, 2021	108,036	\$ 11.49

Outstanding stock options at December 31, 2021, summarized by exercise price:

Exercise Price Per Share	Outstanding Weighted Average		
	Number of Shares	Remaining Life (Months)	Exercise Price
\$11.49	108,036	36	\$ 11.49
	<u>108,036</u>		<u>\$ 11.49</u>

The total intrinsic value of options exercised during 2021, 2020, and 2019 was \$119, \$1,393, and \$393, respectively. Cash received from stock options exercised during 2021, 2020, and 2019 was \$172, \$1,533, and \$454, respectively.

Performance Incentive Stock Option Plan

Activity of the performance incentive stock option plan:

	Number of Shares	Weighted Average Price Per Share
Balance outstanding, December 31, 2018	140,411	\$ 11.49
Options exercised	(19,629)	11.49
Balance outstanding, December 31, 2019	120,782	\$ 11.49
Options exercised	(6,124)	11.49
Balance outstanding, December 31, 2021 and 2020	<u>114,658</u>	<u>\$ 11.49</u>

All the performance incentive stock options outstanding as of December 31, 2021, have an exercise price per share of \$11.49 and a remaining life of 36 months.

(14) Accumulated Other Comprehensive Loss

The following table lists the beginning balance, annual activity and ending balance of foreign currency translation adjustment included as a component of accumulated other comprehensive loss:

Balance, December 31, 2018	\$ (4,507)
Foreign currency translation adjustment, net of tax effects of \$802	(1,191)
Balance, December 31, 2019	(5,698)
Foreign currency translation adjustment, net of tax effects of \$2,521	(3,624)
Balance, December 31, 2020	(9,322)
Foreign currency translation adjustment, net of tax effects of \$76	(4,462)
Balance, December 31, 2021	<u>\$ (13,784)</u>

(15) Equity Method Investment

On August 2, 2016, AMVAC BV entered into a joint venture with Huifeng (Hong Kong) Ltd, which is a wholly owned subsidiary of the Huifeng Group. The resulting entity, Hong Kong JV, was intended to focus on activities such as market access and technology transfer between the two members. AMVAC BV is a 50% owner of the entity.

On June 27, 2017, both AMVAC BV and Huifeng (Hong Kong) Ltd. made individual capital contributions of \$950 to the Hong Kong JV. As of December 31, 2021, 2020 and 2019, the Company's ownership position in the Hong Kong JV was 50%. The Company utilizes the equity method of accounting with respect to this investment.

On July 7, 2017, the Hong Kong JV purchased the shares of Profeng Australia, Pty Ltd. (“Profeng”), for a total consideration of \$1,900. The purchase consists of Profeng Australia, Pty Ltd Trustee and Profeng Australia Unit Trust. Both Trust and Trustee were previously owned by Huifeng (via its wholly owned subsidiary Huifeng (Hong Kong) Ltd). For the years ended December 31, 2021, 2020 and 2019, the Company recognized losses of \$388 (including an impairment charge of \$288), \$125, and \$209, respectively, as a result of the Company’s ownership position in the Hong Kong JV. As at December 31, 2021, 2020 and 2019, the carrying value of the Company’s investment in the Hong Kong JV was \$0, \$388 and \$513, respectively.

(16) Equity Investments

In February 2016, AMVAC BV made an equity investment of \$3,283 in Biological Products for Agriculture (“Bi-PA”). Bi-PA develops biological plant protection products that can be used for the control of pests and disease of agricultural crops. As of December 31, 2021, 2020 and 2019, the Company’s ownership position in Bi-PA was 15%. Since this investment does not have readily determinable fair value, the Company has elected to measure the investment at cost less impairment, if any, and to record an increase or decrease for changes resulting from observable price changes in orderly transactions for the identical or a similar investment of Bi-PA. The Company periodically reviews the investment for possible impairment. The Company recorded an impairment in the amount of \$399 during the year ended December 31, 2021. There were no impairment or observable price changes on the investment during the years ended December 31, 2020 and 2019. The investment is recorded within other assets on the consolidated balance sheets.

On April 1, 2020, AMVAC purchased 6.25 million shares, an ownership of approximately 8%, of common stock of Clean Seed Capital Group Ltd. (TSX Venture Exchange: “CSX”) for \$1,190. The shares are publicly traded, have a readily determinable fair value, and are considered a Level 1 investment. The fair value of the stock amounted to \$1,516 and \$1,907 as of December 31, 2021 and 2020, respectively, and the Company recorded a loss of \$391 and a gain of \$717 for the years ended December 31, 2021 and 2020, respectively. The investment is recorded within other assets on the consolidated balance sheets.

(17) Share Repurchase Programs

On March 8, 2022, pursuant to a Board of Directors resolution, the Company announced its intention to repurchase an aggregate number of up to 1,000,000 shares of its common stock, par value \$0.10 per share, in the open market over the succeeding one year at a price not to exceed \$20 per share, subject to limitations and restrictions under applicable securities laws.

On August 30, 2021, pursuant to a Board of Directors resolution, the Company announced its intention to repurchase an aggregate number of 300,000 shares of its common stock, par value \$0.10 per share, in the open market over the succeeding six months. During 2021, the Company purchased 300,000 shares of its common stock for a total of \$4,579 at an average price of \$15.26 per share.

On November 5, 2018, pursuant to a Board of Directors resolution, the Company announced its intention to repurchase an aggregate number of shares with a total purchase price not to exceed \$20,000 of its common stock, par value \$0.10 per share, in the open market, at a price not to exceed \$17 per share, subject to limitations and restrictions under applicable securities laws. The Shares Repurchase Program expired on March 8, 2019. During 2019, the Company purchased 158,048 shares at an average price of \$16.48 per share, for a total of \$2,604.

The table below summarizes the number of shares of our common stock that were repurchased during the years ended December 31, 2021, 2020 and 2019. The shares and respective amount are recorded as treasury shares on the Company’s consolidated balance sheets.

Month ended	Total number of shares purchased	Average price paid per share	Total amount paid
August 31, 2021	78,300	\$ 15.37	\$ 1,203
September 30, 2021	221,700	\$ 15.23	\$ 3,376
Total number of shares repurchased	<u>300,000</u>	\$ 15.26	<u>\$ 4,579</u>
January 31, 2019	<u>158,048</u>	\$ 16.48	<u>\$ 2,604</u>
Total number of shares repurchased	<u>158,048</u>	\$ 16.48	<u>\$ 2,604</u>

(18) Supplemental Cash Flows Information

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Supplemental cash flow information:			
Cash paid during the year for:			
Interest	<u>\$ 3,520</u>	<u>\$ 5,313</u>	<u>\$ 7,121</u>
Income taxes, net	<u>\$ 5,796</u>	<u>\$ 3,881</u>	<u>\$ 9,276</u>
Non-cash transactions:			
ROU assets in exchange for lease liabilities	<u>\$ 18,521</u>	<u>\$ 6,309</u>	<u>\$ 3,580</u>
Deferred consideration in connection with business and asset acquisitions	<u>\$ 758</u>	<u>\$ 2,630</u>	<u>\$ 3,051</u>
Cash dividends declared and included in accrued expenses	<u>\$ 594</u>	<u>\$ 592</u>	<u>\$ 582</u>

**AMERICAN VANGUARD CORPORATION AND SUBSIDIARIES
LISTING OF SUBSIDIARIES**

Subsidiaries of the Company and the jurisdiction in which each company was incorporated are listed below. Unless otherwise indicated parenthetically, 100% of the voting securities of each subsidiary are owned by the Company. All companies indicated with an asterisk (*) are subsidiaries of AMVAC. All of the following subsidiaries are included in the Company's consolidated financial statements:

AMVAC Chemical Corporation	California
GemChem, Inc.	California
2110 Davie Corporation (formerly ABSCO Distributing)	California
AMVAC Chemical UK Ltd*	England
AMVAC do Brasil Representações Ltda*	Brazil
Agroservicios Amvac, SA de CV*	Mexico
Amvac Mexico S. De R.L. De C.V.*	Mexico
AMVAC de Costa Rica Srl	Costa Rica
AVD International LLC*	Delaware
AMVAC CV	Netherlands
AMVAC Netherlands BV*	Netherlands
Envance Technologies, LLC*	Delaware
OHP Inc.*	California
Amvac Colombia SAS	Columbia
AgriCenter S.A	Costa Rica
Tyratech, Inc.	Delaware
American Vanguard Australia PTY Ltd	Australia
Amvac Singapore PTE Ltd	Singapore
AMVAC do Brazil 3p LTDA	Brazil
Amvac Canada ULC	Canada
Amvac Hong Kong Limited	Hong Kong
AgNova Technologies Pty Ltd	Australia
Agrinos Biotech (Shanghai) Co., LTD	China
Agrinos do Brazil Fertilizantes Biologicos LTDA	Brasil
Agrinos India Private Limited	India
Agrinos Ukraine LLC	Ukraine
Agrinos Iberia S.L.	Spain
Bioderpac SA de CV	Mexico

Consent of Independent Registered Public Accounting Firm

American Vanguard Corporation
Newport Beach, California

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-125813, 333-102381, 333-76218, and 333-64220) of American Vanguard Corporation of our reports dated March 11, 2022, relating to the consolidated financial statements and schedule, and the effectiveness of American Vanguard Corporation's internal control over financial reporting, which appear in this Form 10-K.

/s/ BDO USA, LLP

Costa Mesa, California
March 11, 2022

AMERICAN VANGUARD CORPORATION
CHIEF EXECUTIVE OFFICER CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Eric G. Wintemute, certify that:

1. I have reviewed this report on Form 10-K of American Vanguard 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 consolidated 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 Company as of, and for, the periods presented in this report;
4. The Company'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 Company 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 Company, 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 Company's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosures 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 Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of Company's board of directors:
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the Company'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 Company's internal control over financial reporting.

Date: March 11, 2022

/s/ Eric G. Wintemute

Eric G. Wintemute
Chief Executive Officer and Chairman of the
Board

AMERICAN VANGUARD CORPORATION
CHIEF FINANCIAL OFFICER CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David T. Johnson, certify that:

1. I have reviewed this report on Form 10-K of American Vanguard 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 consolidated financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company'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 Company 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 Company, 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 Company's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosures 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 Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of Company's board of directors:
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the Company'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 Company's internal control over financial reporting.

Date: March 11, 2022

/s/ David T. Johnson

David T. Johnson
Chief Financial Officer and Principal
Accounting Officer

AMERICAN VANGUARD CORPORATION
CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of American Vanguard Corporation (the “Company”) on Form 10-K for the period ending December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned Chief Executive Officer and Chief Financial Officer of the Company hereby certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to 906 of the Sarbanes-Oxley Act of 2002 that based on their knowledge (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (2) the information contained in the Report fairly represents, in all material respects, the financial condition and results of operations of the Company as of and for the periods covered in the Report.

/s/ ERIC G. WINTEMUTE

Eric G. Wintemute,
Chief Executive Officer and Chairman of the Board

/s/ DAVID T. JOHNSON

David T. Johnson
Chief Financial Officer and Principal Accounting Officer

March 11, 2022

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to American Vanguard Corporation and will be retained by American Vanguard Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished to the Securities and Exchange Commission as an exhibit to the Form 10-K and shall not be considered filed as part of the Form 10-K.