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 fiscal year ended December 31, 2023
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 1-1687

PPG INDUSTRIES, INC.
(Exact name of registrant as specified in its charter)

Pennsylvania	25-0730780
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
One PPG Place Pittsburgh Pennsylvania	15272
(Address of principal executive offices)	**(Zip code)**
Registrant's telephone number, including area code:	412 434-3131

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 – Par Value $1.66 2/3	PPG	New York Stock Exchange
0.875% Notes due 2025	PPG 25	New York Stock Exchange
1.875% Notes due 2025	PPG 25A	New York Stock Exchange
1.400% Notes due 2027	PPG 27	New York Stock Exchange
2.750% Notes due 2029	PPG 29A	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 if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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

Indicate by checkmark whether the registrant has submitted electronically every Interactive Date File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
(Do not check if a 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. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of common stock held by non-affiliates as of June 30, 2023, was $34,856 million.

As of January 31, 2024, 235,254,665 shares of the Registrant's common stock, with a par value of $1.66 $^{2}/_{3}$ per share, were outstanding. As of that date, the aggregate market value of common stock held by non-affiliates was $33,112 million.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of PPG Industries, Inc. Proxy Statement for its 2024 Annual Meeting of Shareholders (the "Proxy Statement") to be filed with the Securities and Exchange Commission within 120 days after the end of the Company's fiscal year, are incorporated herein by reference into Part III of this report.

PPG INDUSTRIES, INC.
AND CONSOLIDATED SUBSIDIARIES

As used in this report, the terms “PPG,” “Company,” “Registrant,” “we,” “us” and “our” refer to PPG Industries, Inc., and its subsidiaries, taken as a whole, unless the context indicates otherwise.

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Part I

Item 1. Business

PPG Industries, Inc. manufactures and distributes a broad range of paints, coatings and specialty materials. PPG was incorporated in Pennsylvania in 1883. PPG's vision is to be the first-choice partner to meet our customers' evolving needs for innovative paints, coatings and surface solutions to protect and beautify the world.

PPG has a proud heritage with a demonstrated commitment to innovation, sustainability, community engagement and development of leading-edge paint, coatings and specialty materials technologies. Through dedication and industry-leading expertise, we solve our customers' biggest challenges, collaborating closely to find the right path forward. PPG is a global leader with manufacturing facilities and equity affiliates in more than 70 countries.

PPG supplies paints, coatings and specialty materials to customers serving a wide array of end-uses, including industrial equipment and components; packaging material; aircraft and marine equipment; automotive original equipment; automotive refinish and aftermarket; pavement marking products; as well as coatings for other industrial and consumer products. PPG also serves commercial and residential new build and maintenance customers by supplying coatings to painting and maintenance contractors and directly to consumers for decoration and maintenance.

The coatings industry is highly competitive and consists of several large firms with global presence and many firms supplying local or regional markets. PPG competes in its primary markets with the world's largest coatings companies, most of which have global operations, and with many regional coatings companies.

PPG's business is comprised of two reportable business segments: Performance Coatings and Industrial Coatings as described below:

PERFORMANCE COATINGS

Strategic Business Unit	Products	Primary Customers / End-uses	Main Distribution Methods	Primary Brands
Aerospace Coatings	Coatings, sealants, transparencies, transparent armor, adhesives, engineered materials, packaging and chemical management services for the aerospace industry	Commercial, military, regional jet and general aviation aircraft	Direct to customers and company-owned distribution network	PPG®
Architectural Coatings Americas and Asia Pacific	Paints, wood stains, adhesives, sealants and purchased sundries	Painting and maintenance contractors and consumers for decoration and maintenance of residential and commercial building structures	Company-owned stores, home centers and other regional or national consumer retail outlets, paint dealers, concessionaires, independent distributors and direct to consumers	PPG®, GLIDDEN®, COMEX®, OLYMPIC®, DULUX® (in Canada), PPG PITTSBURGH PAINTS®, MULCO®, FLOOD®, LIQUID NAILS®, SICO®, RENNER®, TAUBMANS®, WHITE KNIGHT®, BRISTOL® and HOMAX®
Architectural Coatings Europe, Middle East and Africa (EMEA)				SIGMA®, HISTOR®, SEIGNEURIE®, GUITTET®, PEINTURES GAUTHIER®, RIPOLIN®, JOHNSTONE'S®, LEYLAND®, PRIMALEX®, DEKORAL®, TRILAK®, PROMINENT PAINTS®, GORI®, BONDEX®, DANKE!® and TIKKURILA®
Automotive Refinish Coatings	Coatings, solvents, adhesives, sealants, purchased sundries, software and paint films	Automotive and commercial transport/fleet repair and refurbishing, light industrial coatings and specialty coatings for signs	Independent distributors and direct to customers	PPG®, SEM®, SPRINT®
Protective and Marine Coatings	Coatings and finishes for the protection of metals and structures	Metal fabricators, heavy duty maintenance contractors and manufacturers of ships, bridges and rail cars	Direct to customers, company-owned architectural coatings stores, independent distributors and concessionaires	PPG®
Traffic Solutions	Paints, thermoplastics, pavement marking products and other advanced technologies for pavement marking	Government, commercial infrastructure, painting and maintenance contractors	Direct to customers, government agencies and independent distributors	Ennis-Flint®

Segment Overview	This reportable business segment primarily supplies a variety of protective and decorative coatings, adhesives, sealants and finishes along with pavement marking products, paint strippers, stains and related chemicals, transparencies, transparent armor and paint films.
Alliances	PPG has an established alliance with Asian Paints Ltd. to serve certain automotive refinish customers in India.
Major Competitive Factors	Product performance, technology, quality, technical and customer service, price, customer productivity, distribution and brand recognition
Global Competitors	Akzo Nobel N.V., Axalta Coating Systems Ltd., BASF Corporation, Benjamin Moore, Hempel A/S, Kansai Paints, the Jotun Group, Masco Corporation, Nippon Paint, RPM International Inc., The Sherwin-Williams Company and 3M Company
Principal Manufacturing and Distribution Facilities	Amsterdam, Netherlands; Birstall, United Kingdom; Busan, South Korea; Carrollton, Texas; Clayton, Australia; Delaware, Ohio; Deurne, Belgium; Ennis, Texas; Gonfreville, France; Greensboro, North Carolina; Huntsville, Alabama; Huron, Ohio; Kunshan, China; Little Rock, Arkansas; Milan, Italy; Mojave, California; Nykvarn, Sweden; Oakwood, Georgia; Ontario, Canada; Ostrow Wielkopolski, Poland; Ruitz, France; Shildon, United Kingdom; Sylmar, California; Stowmarket, United Kingdom; Tepexpan, Mexico; Vantaa, Finland; and Wroclaw, Poland.

INDUSTRIAL COATINGS

Strategic Business Unit	Products	Primary Customers / End-uses	Main Distribution Methods	Primary Brands
Automotive OEM[a] Coatings	Specifically formulated coatings, adhesives and sealants, metal pretreatments and paint films	Automotive original equipment, including combustion engine, commercial, and electric vehicles, and automotive parts and accessories, including battery-related components	Direct to manufacturing companies and various coatings applicators	PPG®
Industrial Coatings	Specifically formulated coatings, adhesives and sealants and metal pretreatments; services and coatings application	Appliances, agricultural and construction equipment, consumer electronics, building products (including residential and commercial construction), kitchenware, transportation vehicles and numerous other finished products; On-site coatings services within several customer manufacturing locations as well as at regional service centers.		PPG®
Packaging Coatings	Specifically formulated coatings	Metal cans, closures, and plastic and aluminum tubes for food, beverage and personal care, and promotional and specialty packaging		PPG®
Specialty Coatings and Materials	Amorphous precipitated silicas, TESLIN® substrate, Organic Light Emitting Diode (OLED) materials, optical lens materials and photochromic dyes	Silicas - Tire, battery separator and other end-uses TESLIN - Labels, e-passports, drivers' licenses, breathable membranes, loyalty cards and identification cards OLED - displays and lighting Lens materials - optical lenses, coatings and color-change products		PPG® TESLIN®

(a) Original equipment manufacturer (OEM)

Segment Overview	This reportable business segment primarily supplies a variety of protective and decorative coatings and finishes along with adhesives, sealants, metal pretreatment products, optical monomers and coatings, low-friction coatings, precipitated silicas and other specialty materials.
Alliances	PPG has established alliances with Kansai Paints to serve Japanese-based automotive OEM customers in North America and Europe and Asian Paints Ltd. to serve certain aftermarket customers and automotive OEM customers in India.
Major Competitive Factors	Product performance, technology, quality, technical and customer service, price, customer productivity and distribution.
Global Competitors	Akzo Nobel N.V., Axalta Coating Systems Ltd., BASF Corporation, Kansai Paints, Nippon Paint and The Sherwin-Williams Company
Principal Manufacturing and Distribution Facilities	Barberton, Ohio; Cheonan, South Korea; Cieszyn, Poland; Circleville, Ohio; Cleveland, Ohio; Delfzijl, Netherlands; Lake Charles, Louisiana; Oak Creek, Wisconsin; Quattordio, Italy; San Juan del Rio, Mexico; Springdale, Pennsylvania; Sumaré, Brazil; Weingarten, Germany; and Tianjin and Zhangjiagang, China.

Research and Development

($ in millions, except percentages)	*2023*	*2022*	*2021*
Research and development costs, including depreciation of research facilities	$456	$470	$463
% of annual net sales	2.5 %	2.7 %	2.8 %

Technology innovation has been a hallmark of PPG's success throughout its history. The Company seeks to optimize its investment in research and development to create new products to drive profitable growth. We align our product development with the macro trends in the markets we serve, including a focus on sustainability and productivity, and leverage core technology platforms to develop products to address unmet market needs. Additionally, we operate laboratories in close geographic proximity to our customers, and we customize our products for our customers' end-use applications. Our history of successful technology introductions is based on a commitment to an efficient and effective innovation process and disciplined portfolio management. We have obtained government funding for a small portion of the Company's research efforts, and we will continue to pursue government funding, where appropriate.

We own and operate several facilities to conduct research and development for new and improved products and processes. In addition to the Company's centralized principal research and development centers (see Item 2. "Properties" of this Form 10-K), operating segments manage their development through centers of excellence. As part of our ongoing efforts to manage our formulations and raw material costs effectively, we operate global competitive sourcing laboratories. Because of our broad array of products and customers, we are not materially dependent upon any single technology platform.

Raw Materials, Energy and Logistics

PPG uses a wide variety of complex raw materials that serve as the building blocks of our manufactured products. The Company's most significant raw materials include resins, reactants, solvents, titanium dioxide, epoxy and emulsions. Raw materials include both organic, primarily petroleum-derived, materials and inorganic materials, including titanium dioxide. Raw materials represent PPG's single largest production cost component.

Most of the raw materials and energy used in production are purchased from outside sources, and the Company has made, and continues to make, supply arrangements to meet our planned operating requirements for the future. Supply of critical raw materials and energy is managed by establishing contracts with multiple sources and identifying alternative materials or technology whenever possible. In support of our decarbonization efforts, we are increasing the amount of renewable energy secured for our operating facilities and increasingly evaluating alternative raw materials that offer sustainable benefits and support the circular economy, including recycled and renewable feedstocks. Prices for certain of our raw materials typically fluctuate with energy prices and global supply and demand changes; however, pricing may be impacted by the fact that the manufacture of our raw materials is several steps downstream from crude oil, natural gas, and other key feedstocks.

Through effective management of raw materials, energy and logistics, the Company aims to maintain a competitive cost position and ensure ongoing security of supply. Security of a sufficient supply of high-quality raw materials is important to PPG's continued success as it allows the Company to increase production as necessary to keep pace with customer demand. While PPG faced certain raw material shortages and logistical challenges during 2022, raw material and logistics availability continued to improve throughout 2023 and is now comparable to pre-pandemic conditions. We continue to focus on improving our competitive cost position and expanding our supply of high-quality raw materials, including strategic initiatives to qualify multiple sources of supply.

We typically experience fluctuating prices for energy and raw materials driven by various factors, including changes in supplier feedstock costs and inventories, global industry activity levels, foreign currency exchange rates, government regulation, and global supply and demand factors. In 2023 raw material costs remained high compared to historic levels, but moderated compared to 2022 levels, resulting in a decrease to our operating costs of more than $500 million. Given the uncertainty associated with the various factors that drive raw material prices, we are not able to predict the 2024 full-year impact of changes in raw material costs versus 2023; however, we do not currently expect to incur significant raw material inflation during 2024. While raw material costs declined during 2023, the Company continues to incur wage inflation, and anticipates further wage inflation impacts in 2024.

We are subject to existing and evolving standards relating to the regulation and registration of chemicals which could potentially impact the availability and viability of some of the raw materials we use in our production processes. Our ongoing, global product stewardship efforts are directed at maintaining our compliance with these standards. We anticipate that the number of chemical registration regulations will continue to increase globally, and we have implemented programs to track and comply with these regulations.

Our commitment to sustainability extends to our suppliers as an extension of our internal focus on sustainability. The PPG Global Supplier Code of Conduct clarifies our global expectations in the areas of business integrity, labor practices,

associate health and safety, and environmental management. Our Supplier Sustainability Policy builds upon our Global Supplier Code of Conduct by establishing expectations for sustainability within our supply chain. This policy reinforces our expectations that our suppliers, as well as their subcontractors, will comply fully with applicable laws and adhere to internationally recognized environmental, social and corporate-governance standards.

Global Operations

PPG has significant non-U.S. operations. This broad geographic footprint serves to lessen the significance to us of economic impacts occurring in any one region of the world. As a result of our global footprint, we are subject to certain inherent risks, including economic and political conditions in international markets, trade protection measures and fluctuations in foreign currency exchange rates. During 2023, favorable foreign currency translation increased Net sales by approximately $102 million and Income before income taxes by approximately $25 million.

Refer to Note 20, “Revenue Recognition” in Item 8 of this Form 10-K for additional geographic information pertaining to sales and Note 21, “Reportable Business Segment Information” in Item 8 of this Form 10-K for geographic information related to PPG’s property, plant and equipment.

Seasonality

PPG’s Income before income taxes has typically been greater in the second and third quarters and Cash from operating activities has been greatest in the fourth quarter due to end-use market seasonality, primarily in our architectural coatings and traffic solutions businesses. Demand for our architectural coatings and traffic solutions products is typically the strongest in the second and third quarters due to higher home improvement, maintenance and construction activity during the spring and summer months in the U.S., Canada and Europe. The Latin American paint season is the strongest in the fourth quarter. These cyclical activity levels result in the collection of outstanding receivables and lower inventory on hand in the fourth quarter generating higher Cash from operating activities.

Human Capital

The average number of people employed by PPG during 2023 was approximately 53,000, of which approximately 16,300 were in the United States and approximately 36,700 were elsewhere in the world. The Company has numerous collective bargaining agreements throughout the world. We observe local customs, laws and practices in labor relations when negotiating collective bargaining agreements. There were no significant work stoppages in 2023. While we have experienced occasional work stoppages and may experience some work stoppages in the future, we believe that we will be able to negotiate all labor agreements on satisfactory terms. To date, these work stoppages have not had a significant impact on our results of operations. Overall, we believe we have good relationships with our employees.

The PPG Way is a set of behaviors that enables, empowers and engages each employee to fully live our values and realize our full potential as an organization. It guides our employees and leaders as we strive to achieve our purpose of protecting and beautifying the world. Employee engagement is a measure of the extent to which our employees are involved in, enthusiastic about, and committed to our work and workplace. We conduct employee surveys to increase dialogue among teams and implement meaningful action to improve results.

Our human capital management strategies provide the foundation for our teams to thrive and deliver exceptional performance. These strategies in the areas of culture and purpose, employee engagement, development and pay equity are overseen by the Human Capital Management and Compensation Committee of our Board of Directors. We are committed to ensuring our employees are safe, healthy, enabled, engaged and valued for the diverse talents they bring to PPG. We believe that having quality dialogue with our people, recognizing the value they bring and championing an authentic culture generates engaged employees and a company that is more innovative, productive and competitive. Our focus on and investment in learning and development are crucial to ensuring we keep our people engaged, productive and successful at every stage of their careers. We are committed to promoting from within wherever possible while also bringing in new ideas, thoughts and insights.

Our environmental, health and safety policy and standards define our expectations, and we implement programs and initiatives to reduce health and safety risk in our operations. We measure progress against our health and safety goals using the injury and illness rate, which is calculated as the number of illness and injury incidents per 200,000 work hours. For 2023, our injury and illness rate was 0.32.

One of PPG's greatest strengths is the diversity of our people, who represent wide-ranging nationalities, cultures, languages, religions, ethnicities, and professional and educational backgrounds. Their unique perspectives enable us to meet challenges quickly, creatively and effectively, providing a significant competitive advantage in today's global economy. To ensure our people feel valued and respected, we are committed to providing a workplace that embraces a culture of diversity and inclusion and is free from harassment and bullying. In connection with our focus on diversity, equity and inclusion, PPG operates eight Employee Resource Networks ("ERNs"). These ERNs are open to all employees and are intended to provide an opportunity for in-depth discussion, focus and recommendations on how PPG can deliver higher growth and performance by creating a more diverse, equitable and inclusive organization.

More information about PPG's human capital management strategies and our workforce can be found in the Proxy Statement for our 2024 Annual Meeting of Shareholders and in our ESG Report located at http://sustainability.ppg.com.

Environmental Matters

PPG is committed to operating in a sustainable and productive manner and to helping our customers meet their sustainability goals. Our sustainability efforts are overseen by the Sustainability and Innovation Committee of our Board of Directors. At the management level, day-to-day implementation of our environmental, social and governance ("ESG") initiatives is led by our Vice President, Global Sustainability, who is responsible for coordinating PPG's ESG and sustainability programs and for communicating our ESG progress with our customers, shareholders and other stakeholders. The Vice President, Global Sustainability works with PPG's Sustainability Committee, a committee of management consisting of senior corporate executives, to establish and monitor our sustainability goals, policies, programs and procedures that incorporate sustainability into our business practices, including resource management, climate change impacts, innovation, community engagement, communications, procurement, manufacturing and employee wellness.

Our dedication to innovation is intertwined with sustainability. We are marketing an ever-growing variety of products and services that protect the environment and provide safety and other benefits to our customers. Our products contribute to lighter, more fuel-efficient vehicles, airplanes and ships, and they help our customers reduce their energy consumption, conserve water and reduce waste. These products include compact automotive paint processes and low temperature cure capabilities that save energy and reduce water usage at customer manufacturing sites; sustainably-advantaged waterborne coatings formulations; sustainably-advantaged powder coatings; lightweight sealants and coatings for aircraft; coatings that cool surfaces; coatings for recyclable metal packaging; antimicrobial products; coatings that contain reduced materials of concern; architectural coatings that contain lower carbon content raw materials; silica products for tires that improve vehicle fuel economy; and solutions for autonomous and battery-powered vehicles. For the year ended December 31, 2023, 44% of sales were from sustainably-advantaged products and processes that we have defined as addressing multiple sustainability benefits, including lower emissions, lower toxicity, energy efficiency, use of renewable raw materials or extending durability.

PPG is committed to using resources efficiently and driving sustainability throughout our entire value chain, including continued focus on reducing greenhouse gas emissions, water withdrawal and total energy use. During 2023, PPG announced its near-term 2030 sustainability goals, including greenhouse gas ("GHG") emissions targets that have been validated by the Science Based Targets initiative. PPG's 2030 sustainability goals include a commitment to reduce absolute emissions from its own operations (scope 1 and 2) by 50% by 2030 from a 2019 base year and to reduce absolute scope 3 GHG emissions from purchased goods and services, processing of sold products, and end-of-life treatment of sold products by 30% within the same timeframe. More information about PPG's sustainability values, efforts, goals and data and our community and employee engagement programs can be found in our ESG Report located at http://sustainability.ppg.com.

We are subject to existing and evolving standards relating to the protection of the environment. In management's opinion, the Company operates in an environmentally sound manner and is well positioned, relative to environmental matters, within the industries in which it operates. PPG is negotiating with various government agencies concerning current and former manufacturing sites and offsite waste disposal locations, including certain sites on the National Priority List. While PPG is not generally a major contributor of wastes to these offsite waste disposal locations, each potentially responsible party may face governmental agency assertions of joint and several liability. Generally, however, a final allocation of costs is made based on relative contributions of wastes to the site. There is a wide range of cost estimates for cleanup of these sites, due largely to uncertainties as to the nature and extent of their condition and the methods that may have to be employed for their remediation. The Company has established reserves for onsite and offsite remediation of those sites where it is probable that a liability has been incurred and the amount of loss can be reasonably estimated.

Our experience to date regarding environmental matters leads us to believe that we will have continuing expenditures for compliance with provisions regulating the protection of the environment and for present and future remediation efforts at waste and plant sites. Management anticipates that such expenditures will occur over an extended period of time.

In addition to the $227 million currently reserved for environmental remediation efforts, we may be subject to loss contingencies related to environmental matters estimated to be approximately $100 million to $200 million. These reasonably possible unreserved losses relate to environmental matters at a number of sites, none of which are individually significant. The loss contingencies related to these sites include significant unresolved issues such as the nature and extent of contamination at these sites and the methods that may have to be employed to remediate them.

($ in millions)	***2023***	***2022***	***2021***
Capital expenditures for environmental control projects	$26	$22	$17

We believe that capital expenditures for environmental control projects will be slightly higher in 2024 compared to 2023. Actual future capital expenditures may differ from expectations due to the inherent uncertainties involved in estimating future environmental remediation compliance costs, including possible technological, regulatory and enforcement developments, the results of environmental studies and other factors.

Management believes that the outcome of these environmental contingencies will not have a material adverse effect on PPG's financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized. Refer to Note 15, "Commitments and Contingent Liabilities" in Item 8 of this Form 10-K for additional information related to environmental matters and our accrued liability for estimated environmental remediation costs.

Available Information

The Company's website address is *www.ppg.com*. The Company posts, and shareholders may access without charge, the Company's recent filings and any amendments of its annual reports on Form 10-K, quarterly reports on Form 10-Q and its proxy statements as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission ("SEC"). The Company also posts all financial press releases, including earnings releases, and all other reports filed or furnished to the SEC, including current reports on Form 8-K to its website. Reference to the Company's, the SEC's or other websites herein does not incorporate by reference any information contained on those websites, and such information should not be considered part of this Form 10-K.

Item 1A. Risk Factors

As a global manufacturer of paints, coatings and specialty materials, we operate in a business environment that includes risks. Each of the risks described in this section could adversely affect our results of operations, financial position and liquidity. While the factors listed here are considered to be the more significant factors, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles which may adversely affect our businesses and our results of operations, financial position and liquidity.

Economic Risks

Increases in prices and declines in the availability of raw materials could negatively impact our financial results.

Our financial results are significantly affected by the cost of raw materials. Raw materials include both organic, primarily petroleum-derived, materials and inorganic materials, including titanium dioxide. These raw materials represent PPG's single largest production cost component. Most of our raw materials are purchased from outside sources, and the Company has made, and plans to continue to make, supply arrangements to meet the planned operating requirements for the future. Adequate supply of critical raw materials is managed by establishing contracts, procuring from multiple sources, and identifying alternative materials or technology whenever possible. While not our customary practice, we also import raw materials and intermediates, particularly for use at our manufacturing facilities in the emerging regions of the world. In most cases, those imports are priced in the currency of the supplier and, therefore, if that currency strengthens against the currency of our manufacturing facility, our margins may be lower.

The Company is continuing its aggressive sourcing initiatives to effectively broaden our supply of high quality raw materials. These initiatives include qualifying multiple and local sources of supply, within Asia and other lower cost regions of the world, diversification of our resin supply, including adding on-site resin production at certain manufacturing locations, and a reduction in the amount of titanium dioxide and certain other raw materials used in our product formulations.

PPG continues to undertake actions to maintain supply arrangements adequate to meet planned operating requirements. However, raw material supply chain disruptions, including logistical and transportation challenges, could adversely impact our ability to procure raw materials. An inability to obtain certain critical raw materials has adversely impacted our ability to produce certain products in the past and could do so in the future. If raw material costs increase and we are unable to offset these higher costs in a timely manner, this would adversely impact Income from continuing operations and Cash from operating activities.

The pace of economic growth and level of economic and geopolitical uncertainty could have a negative impact on our results of operations and cash flows.

Demand for our products and services depends, in part, on the general economic conditions affecting the countries and markets in which we do business. Weak economic conditions in certain geographies and changing supply and demand balances in the markets we serve have negatively impacted demand for our products and services in the past and may do so in the future. There is a high level of uncertainty surrounding future global economic conditions due to a number of factors, including the impact of higher interest rates, geopolitical uncertainty, including the international impacts of the ongoing wars in Ukraine and Israel and increasing tensions between China and the United States, commodity market volatility, potential changes to international trade agreements, the imposition of tariffs and the threat of additional tariffs, and labor shortages in certain regions of the world. PPG provides products and services to a variety of end-use markets in many geographies. This broad end-use market exposure and expanded geographic presence lessens the significance of any individual decrease in activity levels; nonetheless, lower demand levels may result in lower sales, which would adversely impact Income from continuing operations and Cash from operating activities.

Fluctuations in foreign currency exchange rates could affect our financial results.

We are exposed to foreign currency exchange rate risk with respect to our sales, expenses, profits, assets and liabilities denominated in currencies other than the U.S. dollar. Because our consolidated financial statements are presented in U.S. dollars, we must translate revenues and expenses into U.S. dollars at the average exchange rate during each reporting period, as well as assets and liabilities into U.S. dollars at exchange rates in effect at the end of each reporting period. Therefore, increases or decreases in the value of the U.S. dollar against other currencies will affect our Net sales, Net income and the value of balance sheet items denominated in foreign currencies. We may use derivative financial instruments to reduce our net exposure to currency exchange rate fluctuations related to foreign currency transactions. However, fluctuations in foreign currency exchange rates, particularly the strengthening or weakening of the U.S. dollar against major currencies, could adversely or positively affect our financial condition and results of operations which are expressed in U.S. dollars.

The industries in which we operate are highly competitive.

With each of our businesses, an increase in competition may cause us to lose market share or lose customers, adversely impacting our sales volumes, or compel us to reduce prices to remain competitive, which could result in reduced margins for our products. Additionally, our ability to increase prices may impact the overall economics for the products we offer. Competitive pressures may not only reduce our margins but may also impact our revenues and our growth which could adversely affect our results of operations.

Public health crises, including pandemics and the measures taken by public health and government authorities to address them, have adversely impacted and could continue to adversely impact our financial condition and results of operations.

Our financial condition, liquidity and results of operations were adversely affected by the COVID-19 pandemic, including impacts from efforts by public health officials to mitigate the spread of COVID-19. The effects of this public health crisis interfered with the ability of PPG, our suppliers, our customers, and others to conduct business and negatively affected consumer confidence and the global economy. Preventative and protective actions taken by public health officials, governments and PPG with respect to the public health crises have and may continue to adversely impact our business, suppliers, distribution channels, and customers, including business shutdowns, reduced workforce availability, reduced ability to supply products, or reduced demand for our products. While we cannot reasonably predict the duration or scope of current and future public health crises, our results of operations, financial position and liquidity have been and may continue to be adversely impacted by the COVID-19 pandemic or any other future health-related crises.

Legal, Regulatory, and Tax Risks

We are subject to existing and evolving standards relating to the protection of the environment.

Environmental laws and regulations control, among other things, the discharge of pollutants into the air and water, the handling, use, treatment, storage and clean-up of hazardous and non-hazardous waste, and the investigation and remediation of soil and groundwater affected by hazardous substances. In addition, various laws regulate health and safety matters. The environmental laws and regulations we are subject to impose liability for the costs of, and damages resulting from, cleaning up current sites, past spills, disposals and other releases of hazardous substances. Violations of these laws and regulations can also result in fines and penalties. Future environmental laws and regulations, including rules requiring expanded reporting of certain environmental, safety and governance information, may require substantial capital expenditures or may require or cause us to modify or curtail our operations, which may have a material adverse impact on our business, financial condition and results of operations.

We are involved in a number of lawsuits and claims, and we may be involved in future lawsuits and claims, in which substantial monetary damages are sought.

PPG is involved in a number of lawsuits and claims, both actual and potential, in which substantial monetary damages are sought. Those lawsuits and claims may relate to contract, patent, environmental, product liability, asbestos exposure, antitrust, employment, securities and other matters arising out of the conduct of PPG's current and past business activities. Any such claims, whether with or without merit, could be time consuming and expensive to defend and could divert management's attention and resources. We maintain insurance against some, but not all, of these potential claims, and the levels of insurance we maintain may not be adequate to fully cover any and all losses. We believe that, in the aggregate, the outcome of all current lawsuits and claims involving PPG, including those described in Note 15, "Commitments and Contingent Liabilities" in Item 8 of this Form 10-K, will not have a material effect on PPG's consolidated financial position or liquidity; however, such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized. Nonetheless, the results of any future litigation or claims are inherently unpredictable, and such outcomes could have a material adverse effect on our results of operations, Cash from operating activities or financial condition.

We are subject to a variety of laws and regulations, which could increase our compliance costs and could adversely affect our results of operations.

We are subject to a wide variety of complex U.S. and non-U.S. laws and regulations, and legal compliance risks, including securities laws, tax laws, environmental laws, employment and pension-related laws, competition laws, U.S. and foreign export and trading laws, and laws governing improper business practices, including bribery. We are affected by new laws and regulations and changes to existing laws and regulations, as well as interpretations by courts and regulators. These laws and regulations effectively expand our compliance obligations and costs.

For example, regulations concerning the composition, use and transport of chemical products continue to evolve. Developments concerning these regulations could potentially impact the availability or viability of some of the raw materials we use in our product formulations and/or our ability to supply certain products to some customers or markets. Import/export sanctions and regulations also continue to evolve and could result in increased compliance costs, slower product movements or additional complexity in our supply chains.

Further, although we believe that we have appropriate risk management and compliance programs in place, we cannot guarantee that our internal controls and compliance systems will always protect us from improper acts committed by employees, agents, business partners or businesses that we acquire. Any non-compliance or such improper actions or allegations could damage our reputation and subject us to civil or criminal investigations and shareholder lawsuits, could lead to substantial civil and criminal, monetary and non-monetary penalties, and could cause us to incur significant legal and investigatory costs.

Changes in the tax regimes and related government policies and regulations in the countries in which we operate could adversely affect our results and our effective tax rate.

As a multinational corporation, we are subject to various taxes in both the U.S. and non-U.S. jurisdictions. Due to economic and political conditions, tax rates in these various jurisdictions may be subject to significant changes. For example, the Organisation for Economic Co-operation and Development has proposed modernizing international tax rules, including global minimum tax standards, which could cause an increase to our effective tax rate or result in higher cash tax liabilities. Our effective income tax rate is also affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets, the introduction of new taxes and changes in tax laws or their interpretation. If our effective income tax rate were to increase, our Cash from operating activities, financial condition and results of operations would be adversely affected. Although we believe that our tax filing positions are appropriate, the final determination of tax audits or tax disputes may be different from what is reflected in our historical income tax provisions and accruals. If future audits find that additional taxes are due, we may be subject to incremental tax liabilities, possibly including interest and penalties, which could have a material adverse effect on our Cash from operating activities, financial condition and results of operations.

Operational and Strategic Risks

Our international operations expose us to additional risks and uncertainties that could affect our financial results.

PPG has a significant investment in global operations. This broad geographic footprint serves to lessen the significance of economic impacts occurring in any one region. Notwithstanding the benefits of geographic diversification, our ability to achieve and maintain profitable growth in international markets is subject to risks related to the differing legal, political, social and regulatory requirements and economic conditions of many countries. As a result of our operations outside the U.S., we are subject to certain inherent risks, including political and economic uncertainty, inflation rates, exchange rates, trade protection measures, local labor conditions and laws, restrictions on foreign investments and repatriation of

earnings, and weak intellectual property protection. Recently, there has been an increase in global geopolitical uncertainty due to a number of factors, including the international impacts of the ongoing wars in Ukraine and Israel and increasing tensions between China and the United States. During 2023, approximately 63% of the Company's total net sales were recognized outside of the United States.

Business disruptions could have a negative impact on our results of operations and financial condition.

Unexpected events, including supply disruptions, temporary plant and/or power outages, work stoppages, natural disasters and severe weather events, including those potentially due to climate change, significant public health issues, computer system disruptions, challenges implementing, upgrading or transitioning enterprise resource planning systems, fires, war or terrorist activities, could increase the cost of doing business or otherwise harm the operations of PPG, our customers and our suppliers. It is not possible for us to predict the occurrence or consequence of any such events. However, such events could reduce our ability to supply products, reduce demand for our products or make it difficult or impossible for us to receive raw materials from suppliers or to deliver products to customers.

The security of our information technology systems could be compromised which could adversely affect our operations or reputation.

We rely extensively on global information technology systems, networks and services, certain of which are managed, hosted, provided and/or used by third parties or their vendors, to conduct our business. We use information technology systems, networks, and services throughout many of our key business processes, including, but not limited to, receiving customer orders, purchasing materials, producing inventory, shipping inventory to customers, collecting customer payments, and paying our employees and vendors.

Numerous and evolving information security threats, including advanced persistent threats and ransomware, pose a risk to the security of our systems, networks and services, as well as to the confidentiality, availability and integrity of our data and of our critical business operations. In addition, because the techniques, tools and tactics used in cyber-attacks frequently change and may be difficult to detect for periods of time, we may face difficulties in anticipating and implementing adequate preventative measures or fully mitigating harms after such an attack. Our information technology systems, networks and services have been, and will likely continue to be, subject to cybersecurity attacks. We have implemented and operate a cybersecurity program designed to protect and preserve the confidentiality, integrity and availability of our networks and systems as well as information that we own or is in our care. Notwithstanding our cybersecurity preparedness activities, we cannot guarantee that our security efforts or the security efforts of our third-party service providers will prevent all cybersecurity events. A material cybersecurity event could result in negative publicity, theft or other financial loss, modification or destruction of proprietary information or key information, manufacture of defective products, theft of personally identifiable information, and/or production downtimes and operational disruptions, which could adversely affect our results of operations.

We may not effectively integrate acquired businesses into our existing operations.

Growth through acquisitions is an important component of the Company's strategy. Over the last decade, we have successfully completed more than 50 acquisitions, and we will likely acquire additional businesses and enter into additional joint ventures in the future. Growth through acquisitions and the formation of joint ventures involve risks, including:

- difficulties in assimilating acquired companies and products into our existing business;
- delays in realizing the benefits from the acquired companies or products;
- diversion of our management's time and attention from other business concerns;
- difficulties due to lack of or limited prior experience in any new markets we may enter;
- unforeseen claims and liabilities, including unexpected environmental exposures, product liability, or existing information technology vulnerabilities;
- unexpected losses of customers or suppliers of the acquired or existing business;
- difficulty in conforming the acquired business' standards, processes, procedures and controls to those of our operations; and
- difficulties in retaining key employees of the acquired businesses.

These risks or other challenges encountered in connection with our past or future acquisitions and joint ventures could cause delays in realizing the anticipated benefits of such acquisitions or joint ventures, or such anticipated benefits may never be realized, which could adversely affect our results of operations, Cash from operating activities or financial condition.

Our ability to understand our customers' specific preferences and requirements, and to innovate, develop, produce and market products that meet customer demand is critical to our business results.

Our business relies on continued global demand for our brands and products. To achieve our business goals, we must develop and sell products that appeal to customers. This is dependent on a number of factors, including our ability to produce products that meet the quality, performance and price expectations of our customers and our ability to develop effective sales, advertising and marketing programs.

We believe the automotive industry will experience significant and continued change in the coming years, including an increase in the production of electric vehicles. Vehicle manufacturers continue to develop new safety features such as collision avoidance technology and self-driving vehicles that may reduce vehicle collisions in the future, potentially lowering demand for our automotive refinish coatings. In addition, through the introduction of new technologies, new business models or new methods of travel, such as ridesharing, the number of automotive OEM new-builds may decline, potentially reducing demand for our automotive OEM coatings and related automotive parts.

Additionally, the development of customer-facing digital channels has and will continue to transform certain retail industries. An inability to develop such solutions and our customer's pace of adoption of those solutions could negatively affect our business or the market demand for our products. We manage our innovation pipeline and introduction of new products through a rigorous stage gate process. We continuously look at ways to optimize and improve the effectiveness of this process to deliver innovation and growth.

Our future growth will depend on our ability to continue to innovate our existing products and to develop and introduce new products. If we fail to keep pace with product innovation on a competitive basis or to predict market demands for our products, our businesses, financial condition and results of operations could be adversely affected.

Our business success depends on attracting, developing and retaining a qualified workforce.

Our continued business success depends on the efforts and abilities of our management team and employees. The skills, experience and industry knowledge of our employees significantly benefit our operations and performance. We compete with other companies both within and outside of our industry for talented personnel in a highly competitive labor market, and we may face challenges attracting or retaining qualified employees. If we are unable to effectively attract, develop and retain a qualified workforce, our businesses, financial condition and results of operations could be adversely affected.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

PPG's cybersecurity program is designed to protect and preserve the confidentiality, integrity and availability of our networks and systems as well as information that we own or is in our care through a risk-based approach. The Company's program is based on the U.S. National Institute for Standards and Technology (NIST) cybersecurity framework and other applicable industry frameworks.

Our cybersecurity program includes:

- ongoing employee cybersecurity awareness and training activities, which include frequent phishing testing;
- access management and access controls intended to implement Principle of Least Privilege (PoLP) access;
- protection of certain data through encryption at rest and in transit;
- monitoring and protection software;
- a vulnerability management program that includes managing the risk of third-party software;
- a cyber incident response plan that provides controls and procedures to support appropriate containment, response, investigation, reporting and recovery of cybersecurity incidents;
- periodic testing of our cybersecurity posture, including by independent third-party consultants; and
- integrating cybersecurity requirements and other provision into various contracts.

PPG has continued to invest in cybersecurity to evolve and improve its program. PPG regularly assesses and measures itself against industry practices to identify opportunities to improve its people, processes and technology used to identify, prevent, detect, respond and recover from cybersecurity incidents. When such improvements are identified and validated as appropriate in PPG's business context, they are incorporated in the roadmap for implementation.

To date, the risks from cybersecurity threats have not materially affected the Company. We have significantly increased our cybersecurity investments over the last five years and have implemented cybersecurity safeguards designed to detect

and prevent cybersecurity events that may have a material adverse effect on the Company. Notwithstanding our increased cybersecurity investments and preparedness activities, sophisticated and targeted computer crime perpetrated by threat actors internal or external to the Company poses a risk to the security of our systems, facilities, and networks and to the confidentiality, availability and integrity of our data, including but not limited to intellectual property and confidential and personal data. This could lead to negative publicity, theft or other financial loss, modification or destruction of proprietary information or key information, manufacture of defective products, production downtimes and operational disruptions, which could materially and adversely affect our reputation, competitiveness and results of operations. Refer to the risk factor titled "*The security of our information technology systems could be compromised which could adversely affect our operations or reputations"* in Item 1A of this Form 10-K for further detail regarding cybersecurity risks that could affect PPG's operations. We maintain insurance covering certain costs that we may incur in connection with cybersecurity incidents, which we believe is commensurate with the size and the nature of our operations. However, the Company may incur expenses and losses related to a cyber incident that are not covered by insurance or are in excess of our insurance coverage.

The PPG Board of Directors (the "Board") has overall responsibility for the oversight of risk management at PPG, which includes cybersecurity risks. The Audit Committee of the Board (the "Audit Committee"), is responsible for oversight of the Company's enterprise risk management ("ERM") program which provides oversight and governance of all of the Company's operational and financial risks including risks from cybersecurity threats to the Company. The Audit Committee receives bi-annual reports and periodic briefings on cybersecurity matters, including key risks to the Company, recent developments, and risk mitigation activities from our Vice President and Chief Information Officer ("CIO") and our Chief Information Security Officer ("CISO"), who are both responsible for overseeing our cybersecurity program. In addition, the full Board receives bi-annual briefings from our CIO on our cybersecurity program. The Board and the Audit Committee also periodically review the results of exercises performed by our advisors as part of an independent assessment of PPG's cybersecurity program and internal preparedness.

In addition, the Enterprise Risk Committee, a committee of senior executives who identify and monitor the risks to PPG and are responsible for our ERM program, receives updated information on cybersecurity risks at each of its meetings.

As part of their oversight of our cybersecurity program, our CIO and our CISO oversee a team of cybersecurity professionals and are responsible for assessing and managing our material risks from cybersecurity threats. Our CIO and CISO are trained information technology professionals, each of whom has earned degrees in information systems and business administration and has many years of experience in or managing global enterprise information technology at various organizations.

PPG maintains an internal communication hierarchy that is designed to communicate the occurrence of certain cybersecurity events and/or incidents into our systems to our CISO, our CIO, our company crisis response team, and, as appropriate, to certain members of senior management. This communication hierarchy includes protocols for informing the Audit Committee and the full Board of certain cybersecurity events and/or incidents and for determining the materiality thereof.

Item 2. Properties

PPG's corporate headquarters is located in the United States in Pittsburgh, Pa. The Company's manufacturing facilities, sales offices, research and development centers and distribution centers are located throughout the world. Refer to Item 1. "Business" of this Form 10-K for the principal manufacturing and distribution facilities by reportable business segment.

The Company's principal research and development centers are located in Allison Park, Pa.; Tianjin, China; Cleveland, Oh.; Springdale, Pa.; Milan, Italy; Monroeville, Pa.; Harmar, Pa.; Ingersheim, Germany; Marly, France; Oak Creek, Wi.; Sumare, Brazil; Amsterdam, Netherlands; Vantaa, Finland; Tepexpan, Mexico; Burbank, Ca.; Zhangjiagang, China; Cheonan, Republic of Korea; Wroclaw, Poland; Bangplee, Thailand; and Sylmar, Ca.

Our headquarters, certain distribution centers and substantially all company-owned paint stores are located in facilities that are leased while our other facilities are generally owned. Our facilities are considered to be suitable and adequate for the purposes for which they are intended and overall have sufficient capacity to conduct business in the upcoming year.

Item 3. Legal Proceedings

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. These lawsuits and claims may relate to contract, patent, environmental, product liability, asbestos exposure, antitrust, employment, securities and other matters arising out of the conduct of PPG's current and past business activities. To the extent these lawsuits and claims involve personal injury, property damage and certain other claims, PPG believes it has adequate insurance; however, certain of PPG's insurers are contesting coverage with respect to some of these claims, and other insurers may contest coverage. PPG's lawsuits and claims against others include claims against insurers and other third parties with respect to actual and contingent losses related to environmental, asbestos and other matters.

From the late 1880's until the early 1970's, PPG owned property located in Cadogan and North Buffalo Townships, Pennsylvania which was used for the disposal of solid waste from PPG's former glass manufacturing facility in Ford City, Pennsylvania. In October 2018, the Pennsylvania Department of Environmental Protection (the "DEP") approved PPG's cleanup plan for the Cadogan Property. In April 2019, PPG and the DEP entered into a consent order and agreement ("CO&A") which incorporated PPG's approved cleanup plan and a draft final permit for the collection and discharge of seeps emanating from the former disposal area. The CO&A includes a civil penalty of $1.2 million for alleged past unauthorized discharges. PPG's former disposal area is also the subject of a citizens' suit filed by the Sierra Club and PennEnvironment seeking remedial measures beyond the measures specified in PPG's approved cleanup plan, a civil penalty in addition to the penalty included in the CO&A and plaintiffs' attorneys fees. PPG and the plaintiffs settled plaintiffs' claims for injunctive relief and PPG agreed to enhancements to the DEP approved cleanup plan and a $250,000 donation to a Pennsylvania nonprofit organization. This settlement has been memorialized by an amendment to the CO&A which was appended to a Consent Agreement between PPG and the plaintiffs which has been entered by the federal Court. The remaining claims in the case for attorneys' fees and a civil penalty are not affected by this settlement. PPG believes that the remaining claims are without merit and intends to defend itself against these claims vigorously.

For many years, PPG has been a defendant in lawsuits involving claims alleging personal injury from exposure to asbestos. For a description of asbestos litigation affecting the Company, see Note 15, "Commitments and Contingent Liabilities" to the accompanying consolidated financial statements in Part I, Item 8 of this Form 10-K.

In the past, the Company and others have been named as defendants in several cases in various jurisdictions claiming damages related to exposure to lead and remediation of lead-based coatings applications. PPG has been dismissed as a defendant from most of these lawsuits and has never been found liable in any of these cases. After having not been named in a new lead-related lawsuit for 15 years, PPG was named as a defendant in two Pennsylvania state court lawsuits filed by Montgomery County and Lehigh County in the respective counties on October 4, 2018 and October 12, 2018. Both suits sought declaratory relief arising out of alleged public nuisances in the counties associated with the presence of lead paint on various buildings constructed prior to 1980. By Opinion and Order dated May 5, 2023, the Pennsylvania Commonwealth Court reversed rulings of the lower trial courts, unanimously ruling that the Counties failed to plead valid causes of action, and remanding both cases to their respective trial courts for dismissal. On June 5, 2023, the Counties filed Petitions for Allowance of Appeal with the Pennsylvania Supreme Court. On November 20, 2023, the Pennsylvania Supreme Court denied the Counties' Petitions and, as such, dismissal of the lawsuit is now final.

Information About Our Executive Officers

Set forth below is information related to the Company's executive officers as of February 15, 2024.

Name	*Age*	*Title*
Timothy M. Knavish [(a)]	58	Chairman and Chief Executive Officer since October 2023
Anne M. Foulkes [(b)]	61	Senior Vice President and General Counsel since September 2018
Vincent J. Morales [(c)]	58	Senior Vice President and Chief Financial Officer since March 2017
K. Henrik Bergström [(d)]	51	Senior Vice President, Architectural Coatings, Latin America, EMEA and Asia Pacific since May 2023
Kevin D. Braun [(e)]	55	Senior Vice President, Industrial Coatings Segment since May 2023
Amy R. Ericson [(f)]	58	Senior Vice President, Protective and Marine Coatings since January 2023
Chancey E. Hagerty [(g)]	50	Senior Vice President, Automotive Refinish Coatings since May 2023
Ramaprasad Vadlamannati [(h)]	61	Senior Vice President, Operations since January 2023

(a) On September 26, 2023, Mr. Knavish was elected Chairman and Chief Executive Officer, effective October 1, 2023. Mr. Knavish served as President and Chief Executive Officer from January 1, 2023 until September 30, 2023. Mr. Knavish served as Chief Operating Officer from March 2022 through December 2022. He previously served as Executive Vice President from October 2019 through February 2022, Senior Vice President, Architectural Coatings and President, PPG EMEA from January 2019 through September 2019, Senior Vice President, Industrial Coatings from October 2017 through December 2018, Senior Vice President, Automotive Coatings from March 2016 through September 2017, Vice President, Protective and Marine Coatings from August 2012 through February 2016 and Vice President, Automotive Coatings, Americas from March 2010 through July 2012.

(b) Ms. Foulkes served as Senior Vice President, General Counsel and Secretary from April 2022 to June 2022 and from August 2018 to September 2018, Vice President and Associate General Counsel and Secretary from March 2016 through July 2018 and Assistant General Counsel and Secretary from April 2011 through February 2016.

(c) Mr. Morales served as Vice President, Finance from June 2016 through February 2017. From June 2015 through June 2016, he served as Vice President, Investor Relations and Treasurer and from October 2007 through May 2015 he served as Vice President, Investor Relations.

(d) Effective May 1, 2023, Mr. Bergström was named Senior Vice President, Architectural Coatings, Latin America, EMEA and Asia Pacific. Mr. Bergström served as Vice President, Architectural Coatings, Latin America, EMEA and Asia Pacific from February 2022 through April 2023 and as Vice President Architectural Coatings, Latin America from April 2017 through January 2022.

(e) Effective May 1, 2023, Mr. Braun was named Senior Vice President, Industrial Coatings Segment. Mr. Braun served as Vice President, Global Industrial Coatings from January 2020 through April 2023 and as Vice President, Industrial Coatings, Americas from September 2013 through December 2019.

(f) Ms. Ericson served as Senior Vice President, Packaging Coatings from July 2018 through December 2022. She served as President of SUEZ Chemical Monitoring and Solutions from 2017 until 2018, President of General Electric Water Services Company from 2015 to 2017 and President and Chief Executive Officer of Alstom SA's U.S. business from 2013 to 2015.

(g) Effective May 1, 2023, Mr. Hagerty was named Senior Vice President, Automotive Refinish Coatings. Mr. Hagerty served as Vice President, Global Automotive Refinish Coatings from January 2020 through April 2023 and as Vice President, Global Industrial Coatings from January 2019 through December 2019.

(h) Mr. Vadlamannati served as Senior Vice President, Protective and Marine Coatings and President PPG EMEA from October 2019 through December 2022, Senior Vice President, Protective and Marine Coatings from March 2016 through September 2019, Vice President, Architectural Coatings, EMEA and Asia Pacific from August 2014 through February 2016, Vice President, Architectural Coatings, EMEA from February 2012 through July 2014, Vice President, Architectural Coatings, EMEA for Region Western Europe from March 2011 through January 2012 and Vice President, Automotive Refinish, EMEA from September 2010 through February 2011.

Item 4. Mine Safety Disclosures

Not Applicable.

Part II

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

The information required by Item 5 regarding market information, including PPG's stock exchange listing and quarterly stock market prices, dividends, holders of common stock, and the stock performance graph is included in Exhibit 13.1 filed with this Form 10-K and is incorporated herein by reference.

Issuer Purchases of Equity Securities - Fourth Quarter 2023

Month	Total Number of Shares Purchased	Avg. Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Max. Number of Shares That May Yet Be Purchased Under the Programs[1]
October 2023				
Repurchase program	—	$—	—	9,043,759
November 2023				
Repurchase program	—	$—	—	7,819,581
December 2023				
Repurchase program	673,638	$148.61	673,638	6,754,871
Total quarter ended December 31, 2023				
Repurchase program	673,638	$148.61	673,638	6,754,871

(1) In December 2017, PPG's board of directors approved a $2.5 billion share repurchase program. The remaining shares yet to be purchased under the program has been calculated using PPG's closing stock price on the last business day of the respective month. This repurchase program has no expiration date.

Item 6. [Reserved]

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

The following discussion includes a comparison of our results of operations and liquidity and capital resources for the years ended December 31, 2023 and 2022. A discussion of changes in our results of operations for the year ended December 31, 2022 as compared to the year ended December 31, 2021 has been omitted from this Form 10-K, but may be found in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our 2022 Form 10-K, filed with the Securities and Exchange Commission on February 16, 2023.

Highlights

Net sales were approximately $18.2 billion in 2023, an increase of 3% compared to the prior year, driven by higher selling prices resulting from continued selling price initiatives. The Company increased net sales led by growth in aerospace coatings and automotive OEM coatings despite lower global industrial production and soft demand conditions in Europe.

Income before income taxes was $1,748 million in 2023, an increase of $367 million compared to the prior year. This increase was primarily due to higher selling prices and lower raw material costs, partially offset by higher selling, general and administrative expense and lower sales volumes.

Performance Overview

Net Sales by Region

			% Change
($ in millions, except percentages)	***2023***	***2022***	***2023 vs. 2022***
United States and Canada	$7,488	$7,383	1.4%
Europe, Middle East and Africa (EMEA)	5,616	5,458	2.9%
Asia Pacific	2,874	2,824	1.8%
Latin America	2,268	1,987	14.1%
Total	$18,246	$17,652	3.4%

Net sales increased $594 million due to the following:

- *Higher selling prices (+5%)*

Partially offset by:

- *Lower sales volumes (-2%)*

For specific business results, see the Performance of Reportable Business Segments section within Item 7 of this Form 10-K.

Cost of sales, exclusive of depreciation and amortization

			% Change
($ in millions, except percentages)	***2023***	***2022***	***2023 vs. 2022***
Cost of sales, exclusive of depreciation and amortization	$10,745	$11,096	(3.2)%
Cost of sales as a % of net sales	58.9 %	62.9 %	(4.0)%

Cost of sales, exclusive of depreciation and amortization, decreased $351 million due to the following:

- *Moderating raw material costs*
- *Lower sales volume*

Partially offset by:

- *Wage and other cost inflation*

Selling, general and administrative expenses

			% Change
($ in millions, except percentages)	***2023***	***2022***	***2023 vs. 2022***
Selling, general and administrative expenses	$4,222	$3,842	9.9%
Selling, general and administrative expenses as a % of net sales	23.1 %	21.8 %	1.3%

Selling, general and administrative expenses increased $380 million primarily due to:

- *Wage and other cost inflation*
- *Unfavorable foreign currency translation*
- *Higher performance-based compensation expense*
- *Selling, general and administrative expenses from acquired businesses*

Partially offset by:

- *Restructuring cost savings*

Other charges and other income

			% Change
($ in millions, except percentages)	***2023***	***2022***	***2023 vs. 2022***
Interest expense	$247	$167	47.9%
Interest income	($140)	($54)	159.3%
Impairment and other related charges, net	$160	$245	(34.7)%
Pension settlement charge	$190	$—	N/A
Other charges/(income), net	$83	($27)	(407.4)%

Interest expense

Interest expense increased $80 million 2023 versus 2022 primarily due to the unfavorable impact of higher interest rates on PPG's variable rate debt obligations.

Interest income

Interest income increased $86 million primarily due to strong cash generation, resulting in higher levels of cash and cash equivalents, as well as the favorable impact of higher interest rates.

Impairment and other related charges, net

During 2023, as a result of its annual impairment testing performed in the fourth quarter, the Company recorded Impairment and other related charges, net of $158 million due to the goodwill impairment recognized for the traffic solutions reporting unit and $2 million to reduce the carrying value of certain indefinite-lived trademarks.

During 2022, the Company recorded Impairment and other related charges, net of $227 million associated with the wind down of the Company's operations in Russia. The Company also recorded impairment charges of $14 million related to the sale of certain small, non-strategic businesses and $4 million to reduce the carrying value of certain indefinite-lived trademarks based on the results of the annual impairment test.

Refer to Note 6, “Goodwill and Other Identifiable Intangible Assets and Note 7 ”Impairment and Other Related Charges, Net” in Item 8 of this Form 10-K for additional information.

Pension settlement charge

In March 2023, the Company purchased group annuity contracts that transferred to third-party insurance companies pension benefit obligations for certain of the Company’s retirees in the U.S. who were receiving their monthly retirement benefit payments from the U.S. pension plan. This transaction resulted in a pension settlement charge of $190 million. Refer to Note 14, “Employee Benefit Plans" in Item 8 of this Form 10-K for additional information.

Other charges/(income), net

Other charges/(income), net was higher in 2023 compared to the prior year primarily due to an increase in the non-service cost components of pension and other postretirement benefit expense, an increase in environmental remediation costs and foreign currency losses recognized in Argentina related to a central bank adjustment to official foreign currency rates, partially offset by a decrease in net business restructuring expense. Refer to Note 18, “Other Charges/(Income), Net” in Item 8 of this Form 10-K for additional information.

Effective tax rate and earnings per diluted share, continuing operations

			% Change
($ in millions, except percentages)	***2023***	***2022***	***2023 vs. 2022***
Income tax expense	$439	$325	35.1%
Effective tax rate	25.1 %	23.5 %	1.6%
Adjusted effective tax rate, continuing operations*	22.0 %	22.0 %	—%
Earnings per diluted share, continuing operations	$5.35	$4.33	23.6%
Adjusted earnings per diluted share, continuing operations*	$7.67	$6.05	26.8%
*See the Regulation G reconciliations - results of operations			

The effective tax rate for the year-ended December 31, 2023 was 25.1%, an increase of 1.6% from the prior year due in part to the goodwill impairment charge, for which there was no tax benefit. The adjusted effective tax rate was 22.0% for the years ended December 31, 2023 and 2022.

Earnings per diluted share from continuing operations for the year ended December 31, 2023 increased year over year primarily due to increased selling prices, moderating raw material cost inflation and favorable foreign currency translation impact, partially offset by lower sales volumes. Refer to the Regulation G Reconciliations - Results from Operations for additional information.

Review and Outlook

PPG achieved annual records for net sales, adjusted earnings per diluted share and operating cash flow in 2023. Net sales were $18.2 billion, an increase of 3% over the prior year. Results were supported by the breadth and diversity of the business portfolio, as the company benefited from higher prices in all businesses and favorable foreign currency translation, which offset lower sales volumes. Net sales, excluding the impact of currency, acquisitions, divestitures and the wind down of Russia operations ("organic sales") increased 3% during the year driven by continued strong growth in our aerospace coatings and automotive OEM coatings businesses. On a regional basis, sales volumes were modestly higher in the Asia Pacific and Latin America regions, and the EMEA, Asia Pacific, and Latin America regions all delivered record segment earnings for the year. Earnings per diluted share from continuing operations was $5.35, compared to $4.33 in the prior year. Adjusted earnings per diluted share was $7.67, up 27% compared to $6.05 in 2022. Combined, segment income increased by more than 30%. Aggregate segment margins were 310 basis points higher than the prior year, driven by strong selling price realization and moderating raw material costs, partially offset by higher selling, general and administrative costs and lower sales volumes.

During 2023, there was continued recovery in the end-use markets that were impacted by mobility restrictions in 2020 and 2021, such as automotive OEM and aerospace coatings; however, demand in these markets remains below 2019 levels. Global automotive OEM manufacturers’ production increased by about 9% versus 2022 due to strong underlying demand in all regions. Demand for PPG products was mixed by end-use market and geographic region. In the U.S. and Canada, demand was strong for aerospace coatings and protective and marine coatings but declined for most other businesses. In Latin America, demand was solid throughout the year with steady demand for architectural products and growth in automotive OEM products, protective and marine coatings and automotive refinish coatings. The PPG Comex business made strong contributions, expanding the number of concessionaire locations during 2023 to nearly 5,200 locations. Demand was soft in Europe with the largest impact on the architectural coatings business. In Asia, demand was mixed, as activity in China was impacted by pandemic-related restrictions and associated disruptions in the first quarter of 2023,

while demand conditions in the rest of Asia were more stable. Raw material costs declined for most of the year, but still finished the fourth quarter above fourth quarter 2019 levels. Raw material costs continue to moderate and are anticipated to ease further in the beginning of 2024. Some other key costs are expected to increase in 2024, including logistics, employee wage and benefit costs and energy costs.

We expect softening global economic activity in 2024 that will likely be uneven by region and end use. In 2024, we expect an increase in volumes driven by demand growth in China, India and Mexico, industry growth in aerospace, and economic stabilization in Europe. We expect global demand for architectural coatings to remain subdued and global industrial production to persist at lower absolute levels. Demand for protective coatings is expected to be strong and growth in the traffic solutions business should be aided in 2024 as infrastructure spending gains momentum. In general, most end-use markets do not have significant excess inventories, and any demand improvement should lead to a faster ramp-up of sales volumes.

Significant other factors

During the year, PPG successfully executed on various strategic initiatives to strengthen the company, including key actions to position PPG for higher organic growth. The Company also continued its ongoing portfolio review leading to the divestitures of both our European and Australian traffic solutions businesses and the recently announced strategic alternatives review of the silicas products business.

We approved business restructuring actions to reduce costs and improve the profitability of our overall business portfolio during 2023, as well as made significant progress on the global restructuring programs that were announced in 2021 and 2022. Total restructuring savings, including the impact of acquisition synergies, was approximately $60 million in 2023. Total restructuring savings are expected to be approximately $35 million in 2024. We expect cash outlays related to restructuring actions of $80 million to $90 million in 2024. We will continue to monitor and aggressively manage the Company's cost structure to ensure alignment with the overall demand environment.

Raw materials are our most significant input cost. PPG experiences fluctuating energy and raw material costs driven by various factors, including changes in supplier feedstock costs and inventories, global industry activity levels, foreign currency exchange rates, and global supply and demand factors.

In 2023, supply chain and pandemic-related disruptions experienced from 2020 through 2022 have eased, resulting in ample supply of commodity-related raw materials in all regions. For 2023 versus 2022, raw material costs moderated, resulting in a favorable impact to our operating costs. We expect manufacturing efficiencies to improve as the year progresses in 2024. While raw material costs declined during the current year, the Company continues to incur wage inflation, and anticipates further wage inflation impacts in 2024.

We achieved selling price improvement across all businesses in 2023, reflecting the Company's efforts to offset various inflationary pressures. The Company will carefully monitor all costs during 2024 and assess the need for additional selling price increases.

In 2023, foreign currency rates were volatile, with the U.S. dollar strengthening against certain currencies and weakening against other currencies in the countries within the regions where PPG operates, resulting in a net favorable impact to net income of $25 million. Notably and separately, in December 2023, the central bank of Argentina adjusted the official foreign currency exchange rate for the Argentine peso, significantly devaluing the currency relative to the United States dollar, resulting in recognition of foreign currency losses of $20 million. We expect that foreign currency rates will continue to be volatile. However, the Company generally purchases raw materials, incurs manufacturing costs and sells finished goods in the same currency, so we typically incur only modest foreign currency transaction-related impacts.

The 2024 effective tax rate from continuing operations is expected to be in the range of 23% to 24%, varying by quarter. This range is the Company's best estimate and represents an increase compared to the 2023 adjusted effective tax rate driven by higher rates in certain countries, including the impact of recent global minimum tax standards, and the geographic mix of earnings.

Over the past five years, the Company used over $800 million of cash to repurchase approximately six million shares of PPG stock, including using $86 million to repurchase shares of PPG stock during 2023. The Company ended the year with approximately $1 billion remaining under its current share repurchase authorization. During 2023, the Company deployed $109 million for acquisitions, $549 million for capital expenditures and $598 million for dividends. In 2023, PPG marked the 52nd annual per share dividend increase and the 124th successive year of annual dividend payments.

PPG ended 2023 with approximately $1.6 billion in cash and short-term investments. The Company expects strong cash generation in 2024.

Regulation G Reconciliations - Results from Operations

PPG believes investors' understanding of the Company's performance is enhanced by the disclosure of net income from continuing operations, earnings per diluted share from continuing operations, PPG's effective tax rate and segment income adjusted for certain items. PPG's management considers this information useful in providing insight into the Company's ongoing performance because it excludes the impact of items that cannot reasonably be expected to recur on a quarterly basis or that are not attributable to our primary operations. Net income from continuing operations, earnings per diluted share from continuing operations, the effective tax rate and segment income adjusted for these items are not recognized financial measures determined in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") and should not be considered a substitute for net income from continuing operations, earnings per diluted share from continuing operations, the effective tax rate, segment income or other financial measures as computed in accordance with U.S. GAAP. In addition, adjusted net income, adjusted earnings per diluted share and the adjusted effective tax rate may not be comparable to similarly titled measures as reported by other companies.

Income before income taxes from continuing operations is reconciled to adjusted income before income taxes from continuing operations, the effective tax rate from continuing operations is reconciled to the adjusted effective tax rate from continuing operations and net income from continuing operations (attributable to PPG) and earnings per share – assuming dilution (attributable to PPG) are reconciled to adjusted net income from continuing operations (attributable to PPG) and adjusted earnings per share – assuming dilution below.

($ in millions, except percentages and per share amounts)	Income Before Income Taxes	Income Tax Expense	Effective Tax Rate	Net Income (attributable to PPG)	Earnings per Diluted Share[1]
Year-ended December 31, 2023					
As reported, continuing operations	$1,748	$439	25.1 %	$1,270	$5.35
Includes:					
Acquisition-related amortization expense	161	40	24.8 %	121	0.51
Business restructuring-related costs, net[2]	43	9	20.9 %	34	0.14
Impairment and other related charges, net[3]	160	—	— %	160	0.67
Portfolio optimization[4]	53	(7)	(13.2 %)	58	0.24
Environmental remediation charges, net[5]	30	7	23.3 %	23	0.10
Argentina currency devaluation losses[6]	20	(4)	(20.0 %)	24	0.10
Insurance recoveries[7]	(16)	(4)	25.0 %	(12)	(0.05)
Pension settlement charge[8]	190	46	24.2 %	144	0.61
Adjusted, continuing operations, excluding certain items	$2,389	$526	22.0 %	$1,822	$7.67

($ in millions, except percentages and per share amounts)	Income Before Income Taxes	Income Tax Expense	Effective Tax Rate	Net Income (attributable to PPG)	Earnings per Diluted Share[1]
Year-ended December 31, 2022					
As reported, continuing operations	$1,381	$325	23.5 %	$1,028	$4.33
Includes:					
Acquisition-related amortization expense	166	40	24.1 %	126	0.53
Business restructuring-related costs, net[2]	75	19	25.3 %	56	0.24
Impairment and other related charges, net[3]	245	31	12.7 %	214	0.90
Portfolio optimization[4]	10	(2)	(20.0 %)	12	0.05
Adjusted, continuing operations, excluding certain items	$1,877	$413	22.0 %	$1,436	$6.05

(1) Earnings per diluted share is calculated based on unrounded numbers. Figures in the table may not recalculate due to rounding.

(2) Business restructuring-related costs, net include business restructuring charges, offset by releases related to previously approved programs, which are included in Other charges/(income), net on the consolidated statement of income, accelerated depreciation of certain assets, which is included in Depreciation on the consolidated statement of income, and other restructuring-related costs, which are included in Cost of sales, exclusive of depreciation and amortization and Selling, general and administrative on the consolidated statement of income.

(3) In the fourth quarter 2023, the Company recorded Impairment and other related charges, net due to goodwill impairment recognized for the traffic solutions reporting unit as a result of its annual goodwill impairment test. The fair value of the traffic solutions reporting unit decreased primarily due to increases in the cost of capital (discount rate assumption) and declines in the reporting unit's long-term forecast driven by challenges at its operations in Argentina due to the highly inflationary environment and changes to the reporting unit's global footprint, including the fourth quarter 2023 divestiture of its European and Australian businesses. In 2022, the Company recorded Impairment and other related charges, net due to the wind down of the company's operation in Russia.

(4) Portfolio optimization includes losses on the sale of non-core assets, including the losses recognized on the sales of the Company's European and Australian traffic solutions businesses in the fourth quarter 2023, which are included in Other charges/(income), net in the consolidated statement of income, accelerated amortization expense recognized related to the exit of a non-core business, which is included in Amortization in the consolidated statement of income, and the impact for the step up to fair value of inventory acquired in certain acquisitions, which is included in Cost of sales, exclusive of depreciation and amortization in the consolidated statement of income. Portfolio optimization also includes advisory, legal, accounting, valuation, other professional or consulting fees, and certain internal costs directly incurred to effect acquisitions, as well as similar fees

and other costs to effect divestitures and other portfolio optimization exit actions. These costs are included in Selling, general and administrative expense in the consolidated statement of income.

(5) Environmental remediation charges represent environmental remediation costs at certain legacy PPG manufacturing sites. These charges are included in Other charges/(income), net in the consolidated statement of income.

(6) In December 2023, the central bank of Argentina adjusted the official foreign currency exchange rate for the Argentine peso, significantly devaluing the currency relative to the United States dollar. Argentina currency devaluation losses represent foreign currency translation losses recognized during December 2023 related to the devaluation of the Argentine peso, which is included in Other charges/(income), net in the consolidated statement of income.

(7) In the first quarter 2023, the Company received reimbursement under its insurance policies for damages incurred at a southern U.S. factory from a winter storm in 2020. In the fourth quarter 2023, the Company received reimbursement for a previously approved insurance claim under a policy covering legacy asbestos-related matters. These insurance recoveries are included in Other charges/(income), net in the consolidated statement of income.

(8) In the first quarter 2023, PPG purchased group annuity contracts that transferred pension benefit obligations for certain of the Company's retirees in the U.S. to third-party insurance companies, resulting in a non-cash pension settlement charge.

Performance of Reportable Business Segments

Performance Coatings

($ in millions, except percentages)	***2023***	***2022***	***$ Change 2023 vs. 2022***	***% Change 2023 vs. 2022***
Net sales	$11,164	$10,694	$470	4.4%
Segment income	$1,709	$1,399	$310	22.2%
Amortization expense	$114	$123	($9)	(7.3)%
Segment income, excluding amortization expense	$1,823	$1,522	$301	19.8%

Performance Coatings net sales increased due to the following:

- *Higher selling prices (+5%)*
- *Foreign currency translation (+1%)*

Partially offset by:

- *Lower sales volumes (-2%)*

In 2023, all businesses within the Performance Coatings reportable business segment achieved higher selling prices, which helped to offset lower sales volumes due to soft demand conditions in Europe.

Architectural coatings – EMEA organic sales were flat year over year, with higher selling prices offset by lower sales volumes. Regional demand remains uneven by country, and positive sales trends occurred in some countries, including the United Kingdom, Poland and the Netherlands.

Architectural coatings – Americas and Asia Pacific organic sales increased a low single-digit percentage during the year primarily due to selling price increases. Sales in the U.S. and Canada were unfavorably impacted by soft do-it-yourself ("DIY") demand. In Mexico, architectural coatings organic sales increased compared to the prior year, as concessionaire network demand continued to be strong throughout 2023 and further selling price increases were implemented.

Automotive refinish coatings organic sales increased a low single-digit percentage year over year. Price gains in all regions and sales volume growth in the Latin America and Asia Pacific regions were partially offset by lower sales volumes in all other regions. In the U.S., body shop activity remains solid, with sales volumes impacted mostly due to shifting order patterns from certain U.S. distribution customers. In Europe, sales volumes were below 2022 levels but began to turn positive in the second half of the year. In China, demand for PPG refinish products continues to recover.

Aerospace coatings organic sales were higher by 20% driven by increases in both price and volume. This strong organic sales growth was achieved despite global air travel remaining below pre-pandemic levels. Demand remained strong in all major product categories throughout the year.

Protective and marine coatings organic sales increased by a mid-single-digit percentage driven by solid selling price realization and higher sales volumes.

Traffic solutions organic sales decreased by a mid-single-digit percentage year over year, with sales volume declines in all regions. In the U.S., the Company continues to prioritize higher margin business.

Segment income increased $310 million year over year primarily due to higher selling prices and moderating raw material costs, partially offset by wage and other cost inflation and lower sales volumes.

Looking Ahead

In the first quarter 2024, demand for aerospace coatings, protective and marine coatings and products sold in Mexico is expected to remain robust. Demand conditions in the Europe region, the Asia Pacific region and for DIY architectural coatings in the U.S are anticipated to remain at lower levels. Aggregate organic sales for the Performance Coatings segment are anticipated to increase by a low single-digit percentage compared to the first quarter 2023. The Company will continue to focus on executing various existing cost-savings initiatives.

Industrial Coatings

			$ Change	% Change
($ in millions, except percentages)	***2023***	***2022***	***2023 vs. 2022***	***2023 vs. 2022***
Net sales	$7,082	$6,958	$124	1.8%
Segment income	$966	$643	$323	50.2%
Amortization expense	$46	$43	$3	7.0%
Segment income, excluding amortization expense	$1,012	$686	$326	47.5%

Industrial Coatings segment net sales increased due to the following:

- *Higher selling prices (+4%)*

Partially offset by:

- *Lower sales volumes (-2%)*

In 2023, all businesses within the Industrial Coatings reportable business segment achieved higher selling prices, which helped to offset a decrease in sales volumes driven by lower global industrial production.

Automotive OEM coatings organic sales increased by a high single-digit percentage year over year driven by higher selling prices and strong sales volume growth in most regions. Sales volume growth was led by the EMEA and Asia Pacific regions, where retail sales and industry build rates are beginning to return to pre-pandemic levels.

For the industrial coatings business, organic sales decreased by a mid-single-digit percentage year over year as higher selling prices were more than offset by lower sales volumes in all regions due to softening global industrial demand.

Packaging coatings organic sales decreased by a mid-single-digit percentage year over year due to lower sales volume in all regions driven by broad demand weakness. These sales volume decreases were partially offset by higher selling prices in most regions.

Specialty coatings and materials organic sales decreased by a mid-single-digit percentage primarily due to lower sales volumes, partially offset by higher selling prices.

Segment income increased $323 million year over year primarily due to higher selling prices and moderating raw material costs, partially offset by wage and other cost of sales inflation and lower sales volumes.

Looking Ahead

In the first quarter 2024, global industrial production is expected to remain at lower levels. Aggregate organic sales are anticipated to decrease by a low single-digit percentage compared to the first quarter 2023. Automotive industry build rates are expected to be flat to slightly lower in most regions, except in the Asia Pacific region where solid growth is anticipated. Additionally, sales volumes in the packaging coatings business are expected to increase compared to the prior-year first quarter. In the fourth quarter, the pricing gains negotiated in 2022 reached their anniversary, and price decreases are anticipated in 2024 due to index pricing with certain customers within the segment and reflecting the elimination of certain energy-based surcharges in Europe from early 2023. The Company will continue to focus on executing against various existing cost-savings initiatives.

Commitments and Contingent Liabilities, including Environmental Matters

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. Refer to Item 3. “Legal Proceedings” and Note 15, “Commitments and Contingent Liabilities” in Item 8 of this Form 10-K for a description of certain of these lawsuits.

As discussed in Item 3 and Note 15, although the result of any future litigation of such lawsuits and claims is inherently unpredictable, management believes that, in the aggregate, the outcome of all lawsuits and claims involving PPG, including asbestos-related claims, will not have a material effect on PPG’s consolidated financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized.

As also discussed in Note 15, PPG has significant reserves for environmental contingencies. Refer to the Environmental Matters section of Note 15 for details of these reserves. It is PPG's policy to accrue expenses for contingencies when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Reserves for environmental contingencies are exclusive of claims against third parties and are generally not discounted. In management's opinion, the Company operates in an environmentally sound manner and the outcome of the Company's environmental contingencies will not have a material effect on PPG's financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized. Management anticipates that the resolution of the Company's environmental contingencies will occur over an extended period of time.

Accounting Standards Adopted in 2023

Note 1, "Summary of Significant Accounting Policies" in Item 8 of this Form 10-K describes the Company's recently adopted accounting pronouncements.

Accounting Standards to be Adopted in Future Years

Note 1, "Summary of Significant Accounting Policies" in Item 8 of this Form 10-K describes accounting pronouncements that have been promulgated prior to December 31, 2023 but are not effective until a future date.

Liquidity and Capital Resources

During the past two years, PPG had sufficient financial resources to meet its operating requirements, to fund our capital spending, including acquisitions, share repurchases and pension plans, and to pay increasing dividends to shareholders.

Cash and cash equivalents and short-term investments

($ in millions)	***2023***	***2022***
Cash and cash equivalents	$1,514	$1,099
Short-term investments	75	55
Total	$1,589	$1,154

Cash from operating activities - continuing operations

($ in millions, except percentages)			*% Change*
	2023	***2022***	***2023 vs. 2022***
Cash from operating activities	$2,411	$963	150.4%

2023 vs. 2022

The $1,448 million increase in Cash from operating activities - continuing operations was primarily due to higher net income driven by higher selling prices and moderating raw material costs and favorable changes in working capital compared to the prior year.

Operating working capital

Operating working capital is a subset of total working capital and represents (1) receivables from customers, net of allowance for doubtful accounts, (2) inventories, and (3) trade liabilities. Refer to Note 3, "Working Capital Detail" in Item 8 of this Form 10-K for further information related to the components of the Company's operating working capital. We believe operating working capital represents the key components of working capital under the operating control of our businesses.

A key metric we use to measure our working capital management is operating working capital as a percentage of sales (fourth quarter sales annualized).

($ in millions, except percentages)	***2023***	***2022***
Trade receivables, net	$2,881	$2,824
Inventories, FIFO	2,376	2,544
Trade creditors' liabilities	2,612	2,538
Operating working capital	$2,645	$2,830
Operating working capital as a % of fourth quarter sales, annualized	15.2 %	16.9 %
Trade receivables, net as a % of fourth quarter sales, annualized	16.6 %	16.9 %
Days sales outstanding	55	56
Inventories, FIFO as a % of fourth quarter sales, annualized	13.7 %	15.2 %
Inventory turnover	4.4	4.5

Environmental expenditures

($ in millions)	*2023*	*2022*
Cash outlays related to environmental remediation activities	$36	$78

We expect cash outlays for environmental remediation activities in 2024 to be between $40 million and $60 million.

Cash used for investing activities

			% Change
($ in millions, except percentages)	*2023*	*2022*	*2023 vs. 2022*
Cash used for investing activities	$556	$461	20.6%

2023 vs. 2022

The $95 million increase in cash used for investing activities was primarily due to higher capital expenditures and lower proceeds from asset sales.

Capital expenditures, including business acquisitions

			% Change
($ in millions, except percentages)	*2023*	*2022*	*2023 vs. 2022*
Capital expenditures [(1)]	$549	$518	6.0%
Business acquisitions, net of cash balances acquired	$109	$114	(4.4)%
Total capital expenditures, including acquisitions	$658	$632	4.1%
Capital expenditures, excluding acquisitions, as a % of sales	3.0 %	2.9 %	3.4%

(1) Includes modernization and productivity improvements, expansion of existing businesses and environmental control projects.

During 2024, capital expenditures, which are expected to be approximately $600 million, will support future organic growth opportunities. The Company will continue to deploy cash focused on shareholder value creation, with a preference for business acquisitions, coupled with prudent debt reduction to enhance financial flexibility.

Cash used for financing activities

			% Change
($ in millions, except percentages)	*2023*	*2022*	*2023 vs. 2022*
Cash used for financing activities	($1,550)	($409)	279.0%

2023 vs. 2022

The $1,141 million increase in cash used for financing activities was primarily due to repayments of long-term debt and lower proceeds from the issuance of debt, partially offset by the absence of net payments on commercial paper.

Share repurchase activity

($ in millions, except number of shares)	*2023*	*2022*
Number of shares repurchased (millions)	0.6	1.5
Cash paid for shares repurchased	$86	$190

The Company has approximately $1.0 billion remaining under the current authorization from the Board of Directors, which was approved in December 2017. The current authorized repurchase program has no expiration date.

Dividends paid to shareholders

($ in millions)	*2023*	*2022*
Dividends paid to shareholders	$598	$570

PPG has paid uninterrupted annual dividends since 1899, and 2023 marked the 52nd successive year of increased annual per-share dividend payments to shareholders. The Company raised its per-share quarterly dividend by approximately 5% to $0.65 per share in July 2023.

Debt issued and repaid

Debt Issued (net of premium/discount and issuance costs)	Year	$ in millions
Term Loan Credit Agreement, due 2026	2023	$550
1.875% notes (€300) due 2025	2022	$319
2.750% notes (€700) due 2029	2022	$742
1.95% note (€50) due 2037	2022	$55

Debt Repaid	Year	$ in millions
3.2% notes ($300)	2023	$300
Term Loan Credit Agreement, due 2024	2023	$1,100
Term Loan Credit Agreement, due 2024	2022	$300
Acquired debt	2022	$2

The Company's commercial paper borrowings are classified as long-term debt based on PPG's intent and ability to refinance these borrowings on a long-term basis. Net payments on commercial paper were zero and $440 million for the years ended December 31, 2023 and December 31, 2022, respectively.

Credit agreements and lines of credit

In April 2023, PPG entered into a €500 million term loan credit agreement (the "Term Loan"). The Term Loan provides the Company with the ability to increase the size of the loan by an amount not to exceed €250 million. The Term Loan contains covenants that are consistent with those in the Credit Agreement discussed below and that are usual and customary restrictive covenants for facilities of its type, which include, with specified exceptions, limitations on the Company's ability to create liens or other encumbrances, to enter into sale and leaseback transactions and to enter into consolidations, mergers or transfers of all or substantially all of its assets. The Term Loan terminates and all amounts outstanding are payable in April 2026. In April 2023, PPG borrowed €500 million under the Term Loan. In December 2023, PPG obtained lender commitments sufficient to increase the size of the Term Loan by €250 million. In January 2024, PPG borrowed the additional €250 million.

In February 2021, PPG entered into a $2.0 billion term loan credit agreement (the "Term Loan Credit Agreement") to finance the Company's acquisition of Tikkurila, and to pay fees, costs and expenses related thereto. The Term Loan Credit Agreement provided the Company with the ability to borrow up to an aggregate principal amount of $2.0 billion on an unsecured basis. In addition to the amounts borrowed to finance the acquisition of Tikkurila, the Term Loan Credit Agreement allowed the Company to make up to eleven additional borrowings prior to December 31, 2021, to be used for working capital and general corporate purposes. The Term Loan Credit Agreement contains covenants that are consistent with those in the Credit Agreement discussed below and that are usual and customary restrictive covenants for facilities of its type, which include, with specified exceptions, limitations on the Company's ability to create liens or other encumbrances, to enter into sale and leaseback transactions and to enter into consolidations, mergers or transfers of all or substantially all of its assets. The Term Loan Credit Agreement matures and all outstanding borrowings are due and payable on the third anniversary of the date of the initial borrowing under the Agreement. In June 2021, PPG borrowed $700 million under the Term Loan Credit Agreement to finance the Company's acquisition of Tikkurila, and to pay fees, costs and expenses related thereto. In December 2021, PPG borrowed an additional $700 million under the Term Loan Credit Agreement. In 2022 and 2023, PPG repaid $300 million and $1.1 billion, respectively, of the Term Loan Credit Agreement using cash on hand. In March 2023, PPG amended the Term Loan Credit Agreement to replace the LIBOR-based reference interest rate option with a reference interest rate option based upon Term Secured Overnight Financing Rate ("SOFR"). The other terms of the Term Loan Credit Agreement remain unchanged. The Term Loan Credit Agreement was fully repaid as of December 31, 2023. Borrowings of $1.1 billion were outstanding under the Term Loan Credit Agreement as of December 31, 2022.

In March 2023, PPG amended its five-year credit agreement (the "Credit Agreement") dated as of August 30, 2019. The amendments to the Credit Agreement replace the LIBOR-based reference interest rate option with a reference interest rate option based upon Term SOFR. The other terms of the Credit Agreement remained unchanged. In July 2023, PPG amended and restated the Credit Agreement, extending the term through July 27, 2028. The amended and restated Credit Agreement provides for a $2.3 billion unsecured revolving credit facility. The Company has the ability to increase the size of the Credit Agreement by up to an additional $750 million, subject to the receipt of lender commitments and other conditions precedent. The Company has the right, subject to certain conditions set forth in the Credit Agreement, to designate certain subsidiaries of the Company as borrowers under the Credit Agreement. In connection with any such designation, the Company is required to guarantee the obligations of any such subsidiaries under the Credit Agreement. There were no amounts outstanding under the Credit Agreement as of December 31, 2023 and December 31, 2022.

The Term Loan and the Credit Agreement require the Company to maintain a ratio of Total Indebtedness to Total Capitalization, as defined in the Term Loan and the Credit Agreement, of 60% or less; provided, that for any fiscal quarter in which the Company has made an acquisition for consideration in excess of $1 billion and for the next five fiscal quarters thereafter, the ratio of Total Indebtedness to Total Capitalization may not exceed 65% at any time. As of December 31, 2023, Total Indebtedness to Total Capitalization as defined under the Credit Agreement and the Term Loan was 42%.

In addition to the amounts available under lines of credit, the Company maintains access to the capital markets and may issue debt or equity securities from time to time, which may provide an additional source of liquidity.

Refer to Note 10, “Borrowings and Lines of Credit” in Item 8 of this Form 10-K for information regarding notes entered into and repaid as well as details regarding the use and availability of committed and uncommitted lines of credit, letters of credit and debt covenants.

Cash requirements

We continue to believe that our cash on hand and short-term investments, cash from operations and the Company’s access to capital markets will continue to be sufficient to fund our operating activities, capital spending, acquisitions, dividend payments, debt service, share repurchases, contributions to pension plans, and PPG’s significant cash requirements. The Company’s significant cash requirements include the following contractual obligations and commitments.

		Obligations Due In:			
($ in millions)	***Total***	***2024***	***2025-2026***	***2027-2028***	***Thereafter***
Long-term debt	$6,050	$302	$2,239	$1,446	$2,063
Interest payments[1]	$966	$134	$239	$192	$401
Operating leases[2]	$896	$216	$313	$183	$184
Unconditional purchase commitments[3]	$343	$136	$157	$36	$14

(1) Interest on all outstanding debt.

(2) Includes interest payments.

(3) The unconditional purchase commitments are principally take-or-pay obligations related to the purchase of certain materials, utilities and services consistent with customary industry practice.

The Company’s off-balance sheet arrangements include unconditional purchase commitments disclosed in the “Liquidity and Capital Resources” section in the cash requirements table as well as letters of credit as discussed in Note 10, “Borrowings and Lines of Credit” in Item 8 of this Form 10-K.

Other liquidity matters

At December 31, 2023, the total amount of unrecognized tax benefits for uncertain tax positions, including an accrual of related interest and penalties along with positions only impacting the timing of tax benefits, was $135 million. The timing of payments will depend on the progress of examinations by tax authorities. PPG does not expect a significant tax payment related to these obligations within the next year. The Company is unable to make a reasonably reliable estimate as to if, or when, any significant cash settlements with tax authorities may occur.

Critical Accounting Estimates

Management has evaluated the accounting policies used in the preparation of the financial statements and related notes presented in Item 8 of this Form 10-K and believes those policies to be reasonable and appropriate. We believe that the most critical accounting estimates made in the preparation of our financial statements are those related to accounting for contingencies, under which we accrue a loss when it is probable that a liability has been incurred and the amount can be reasonably estimated, and to accounting for pensions, other postretirement benefits, business combinations, goodwill and other identifiable intangible assets with indefinite lives because of the importance of management judgment in making the estimates necessary to apply these policies.

Contingencies

Contingencies, by their nature, relate to uncertainties that require management to exercise judgment both in assessing the likelihood that a liability has been incurred as well as in estimating the amount of potential loss. The most important contingencies impacting our financial statements are those related to environmental remediation, to pending, impending or overtly threatened litigation against the Company and to the resolution of matters related to open tax years. For more information on these matters, see Note 15, “Commitments and Contingent Liabilities” and Note 13, “Income Taxes” in Item 8 of this Form 10-K.

Defined Benefit Pension and Other Postretirement Benefit Plans

Accounting for pensions and other postretirement benefits involves estimating the cost of benefits to be provided well into the future and attributing that cost over the time period each employee works. To accomplish this, we make extensive use of assumptions about inflation, investment returns, mortality, turnover, medical costs and discount rates. The Company has established a process by which management reviews and selects these assumptions annually. Refer to Note 14, “Employee Benefit Plans” in Item 8 of this Form 10-K for information on these plans and the assumptions used.

Business Combinations

The Company uses the acquisition method of accounting to allocate costs of acquired businesses to the assets acquired and liabilities assumed based on their estimated fair values at the dates of acquisition. The excess costs of acquired businesses over the fair values of the assets acquired and liabilities assumed is recognized as goodwill. The valuations of the acquired assets and liabilities impacts the determination of future operating results. In addition to using management estimates and negotiated amounts, the Company uses a variety of information sources to determine the estimated fair values of acquired assets and liabilities including: third-party appraisals for the estimated value and lives of identifiable intangible assets and property, plant and equipment; third-party actuaries for the estimated obligations of defined benefit pension plans and similar benefit obligations; and legal counsel or other experts to assess the obligations associated with legal, environmental and other contingent liabilities.

The business and technical judgment of management is used in determining which acquired intangible assets have indefinite lives and in determining the useful lives of acquired finite-lived intangible assets in accordance with the accounting guidance for goodwill and other intangible assets.

Goodwill and Intangible Assets

The Company tests indefinite-lived intangible assets and goodwill for impairment by either performing a qualitative evaluation or a quantitative test at least annually, or more frequently if an indication of impairment arises. The qualitative evaluation is an assessment of factors to determine whether it is more likely than not that the fair value of a reporting unit or asset is less than its carrying amount. In the quantitative test, fair values are estimated using a discounted cash flow model. Key assumptions and estimates used in the discounted cash flow model include projected future revenues, discount rates, operating cash flows, capital expenditures and tax rates. For more information on these matters, see Note 1, “Summary of Significant Accounting Policies” in Item 8 of this Form 10-K.

We believe that the amounts recorded in the financial statements in Item 8 of this Form 10-K related to these contingencies, pensions, other postretirement benefits, business combinations, goodwill and other identifiable intangible assets with indefinite lives are based on the best estimates and judgments of the appropriate PPG management, although actual outcomes could differ from our estimates.

Currency

Comparing spot exchange rates at December 31, 2023 and at December 31, 2022, the U.S. dollar weakened against the currencies of many countries within the regions PPG operates, most notably the Mexican peso. As a result, consolidated net assets at December 31, 2023 increased by $508 million from December 31, 2022.

Comparing average exchange rates during 2023 to those of 2022, the U.S. dollar weakened against the currencies of certain countries where PPG operates, including the Mexican peso and the euro, partially offset by strengthening against the Chinese yuan and Argentine peso. This had a favorable impact of approximately $25 million on full year 2023 Income before income taxes from the translation of this foreign income into U.S. dollars.

Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of the Company. Management’s Discussion and Analysis and other sections of this Annual Report contain forward-looking statements that reflect the Company’s current views with respect to future events and financial performance. You can identify forward-looking statements by the fact that they do not relate strictly to current or historic facts. Forward-looking statements are identified by the use of the words “aim,” “believe,” “expect,” “anticipate,” “intend,” “estimate,” “project,” “outlook,” “forecast” and other expressions that indicate future events and trends. Any forward-looking statement speaks only as of the date on which such statement is made, and the Company undertakes no obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in our reports to the SEC. Also, note the following cautionary statements.

Many factors could cause actual results to differ materially from the Company’s forward-looking statements. Such factors include statements related to the effects on our business of COVID-19, global economic conditions, geopolitical issues, increasing price and product competition by our competitors, fluctuations in cost and availability of raw materials, energy, labor and logistics, the ability to achieve selling price increases, the ability to recover margins, customer inventory levels,

PPG inventory levels, our ability to maintain favorable supplier relationships and arrangements, the timing of and the realization of anticipated cost savings from restructuring initiatives, the ability to identify additional cost savings opportunities, the timing and expected benefits of our acquisitions, difficulties in integrating acquired businesses and achieving expected synergies therefrom, the amount of future share repurchases, economic and political conditions in the markets we serve, the ability to penetrate existing, developing and emerging foreign and domestic markets, foreign exchange rates and fluctuations in such rates, fluctuations in tax rates, the impact of future legislation, the impact of environmental regulations, unexpected business disruptions, the unpredictability of existing and possible future litigation, including asbestos litigation, and government investigations. However, it is not possible to predict or identify all such factors.

Consequently, while the list of factors presented here and in Item 1A is considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements.

Consequences of material differences in the results compared with those anticipated in the forward-looking statements could include, among other things, lower sales or income, business disruption, operational problems, financial loss, legal liability to third parties, other factors set forth in Item 1A of this Form 10-K and similar risks, any of which could have a material adverse effect on the Company's consolidated financial condition, results of operations or liquidity. PPG undertakes no obligation to update any forward-looking statement, except as otherwise required by applicable law.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

PPG is exposed to market risks related to changes in foreign currency exchange rates and interest rates. The Company may enter into derivative financial instrument transactions in order to manage or reduce these market risks. A detailed description of these exposures and the Company's risk management policies are provided in Note 11, "Financial Instruments, Hedging Activities and Fair Value Measurements" in Item 8 of this Form 10-K.

The following disclosures summarize PPG's exposure to market risks and information regarding the use of and fair value of derivatives employed to manage its exposure to such risks. Quantitative sensitivity analyses have been provided to reflect how reasonably possible, unfavorable changes in market rates could impact PPG's consolidated results of operations, cash flows and financial position.

Foreign Currency Risk

We conduct operations in many countries around the world. Our results of operations are subject to both currency transaction and currency translation risk. Certain foreign currency forward contracts outstanding during 2023 and 2022 served as a hedge of a portion of PPG's exposure to foreign currency transaction risk. The fair value of these contracts were net assets of $23 million and $24 million as of December 31, 2023 and December 31, 2022, respectively. The potential reduction in PPG's Income before income taxes resulting from the impact of adverse changes in exchange rates on the fair value of its outstanding foreign currency hedge contracts of 10% for European and Canadian currencies and 20% for Asian and Latin American currencies for the years ended December 31, 2023 and 2022 would have been $402 million and $304 million, respectively.

PPG had U.S. dollar to euro cross currency swap contracts with a total notional amount of $475 million and $775 million as of December 31, 2023 and December 31, 2022, respectively. The fair value of these contracts were net assets of $33 million and $88 million as of December 31, 2023 and 2022, respectively. A 10% increase in the value of the euro to the U.S. dollar would have had an unfavorable effect on the fair value of these swap contracts by reducing the value of these instruments by $46 million and $73 million at December 31, 2023 and 2022, respectively.

As of December 31, 2023 and 2022, PPG had non-U.S. dollar denominated debt outstanding of $3.3 billion and $2.6 billion, respectively. A weakening of the U.S. dollar by 10% against European currencies and by 20% against Asian and South American currencies would have resulted in unrealized translation losses of $363 million and $293 million as of December 31, 2023 and 2022, respectively.

Interest Rate Risk

The Company manages its interest rate risk by balancing its exposure to fixed and variable rates while attempting to minimize its interest costs. PPG has interest rate swaps which converted $375 million and $525 million of fixed rate debt to variable rate debt as of December 31, 2023 and December 31, 2022, respectively. The fair values of these contracts were liabilities of $14 million and $20 million as of December 31, 2023 and 2022, respectively. An increase in variable interest rates of 10% would have lowered the fair values of these swaps and increased interest expense by $5 million and $7 million for the periods ended December 31, 2023 and 2022. Considering the debt balance outstanding as of December 31, 2023 and 2022, a 10% increase in interest rates in the U.S., Canada, Mexico and Europe and a 20% increase in interest rates in Asia and South America would have increased annual interest expense associated with PPG's variable rate debt obligations by $2 million and by $4 million, respectively. Further, a 10% reduction in interest rates would have increased the fair value of the Company's fixed rate debt by approximately $96 million and $116 million as of

December 31, 2023 and 2022, respectively; however, such changes would not have had an effect on PPG's annual Income before income taxes or cash flows.

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of PPG Industries, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheet of PPG Industries, Inc. and its subsidiaries (the “Company”) as of December 31, 2023 and 2022, and the related consolidated statements of income, of comprehensive income, of shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2023, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2023 appearing under Item 15(a)(2) (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become

inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

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

Quantitative Goodwill Impairment Test – Traffic Solutions Reporting Unit

As described in Notes 1 and 6 to the consolidated financial statements, the Company's consolidated goodwill balance was $6,200 million as of December 31, 2023, of which $391 million relates to the traffic solutions reporting unit. Management tests goodwill for impairment by either performing a qualitative evaluation or a quantitative test, at least annually, or more frequently if an indication of impairment exists. Management's quantitative goodwill impairment testing, if deemed necessary, is performed during the fourth quarter of each year by comparing the estimated fair value of an associated reporting unit as of September 30 to its carrying value. Based on the annual goodwill impairment test performed in the fourth quarter of 2023, management determined that the estimated fair value of the traffic solutions reporting unit was less than its carrying value, resulting in recognition of a goodwill impairment charge of $158 million in impairment and other related charges, net. The fair value of the traffic solutions reporting unit was estimated by management using a discounted cash flow model. Key assumptions and estimates used in the discounted cash flow model included projected future revenues, a discount rate, operating cash flows, capital expenditures, and a tax rate.

The principal considerations for our determination that performing procedures relating to the quantitative goodwill impairment test of the traffic solutions reporting unit is a critical audit matter are (i) the significant judgment by management when developing the fair value estimate of the traffic solutions reporting unit; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to the projected future revenues and the discount rate; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's quantitative goodwill impairment test, including controls over the valuation of the traffic solutions reporting unit. These procedures also included, among others (i) testing management's process for developing the fair value estimate of the traffic solutions reporting unit; (ii) evaluating the appropriateness of the discounted cash flow model used by management; (iii) testing the completeness and accuracy of underlying data used in the discounted cash flow model; and (iv) evaluating the reasonableness of management's significant assumptions related to the projected future revenues and the discount rate. Evaluating management's assumption related to the projected future revenues involved evaluating whether the assumption used by management was reasonable considering (i) the current and past performance of the traffic solutions reporting unit; (ii) the consistency with external market and industry data; and (iii) whether the assumption was consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of (i) the appropriateness of the discounted cash flow model and (ii) the reasonableness of the discount rate assumption.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 15, 2024

We have served as the Company's auditor since 2013.

Management Report

Responsibility for Preparation of the Financial Statements and Establishing and Maintaining Adequate Internal Control Over Financial Reporting

We are responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. 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.

We conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2023. In making this evaluation, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework (2013)*. Based on this evaluation we have concluded that, as of December 31, 2023, the Company's internal control over financial reporting was effective.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, has issued their report, included on pages 31-32 of this Form 10-K, regarding the Company's internal control over financial reporting.

/s/ Timothy M. Knavish

Timothy M. Knavish
Chairman and Chief Executive Officer
February 15, 2024

/s/ Vincent J. Morales

Vincent J. Morales
Senior Vice President and Chief Financial Officer
February 15, 2024

Consolidated Statement of Income

	For the Year		
($ in millions, except per share amounts)	***2023***	***2022***	***2021***
Net sales	$18,246	$17,652	$16,802
Cost of sales, exclusive of depreciation and amortization	10,745	11,096	10,286
Selling, general and administrative	4,222	3,842	3,780
Depreciation	391	388	389
Amortization	167	166	172
Research and development, net	433	448	439
Interest expense	247	167	121
Interest income	(140)	(54)	(26)
Impairment and other-related charges, net	160	245	21
Pension settlement charge	190	—	50
Asbestos-related claims reserve adjustment	—	—	(133)
Other charges/(income), net	83	(27)	(112)
Income before income taxes	$1,748	$1,381	$1,815
Income tax expense	439	325	374
Income from continuing operations	$1,309	$1,056	$1,441
(Loss)/income from discontinued operations, net of tax	—	(2)	19
Net income attributable to the controlling and noncontrolling interests	$1,309	$1,054	$1,460
Less: Net income attributable to noncontrolling interests	39	28	21
Net income (attributable to PPG)	$1,270	$1,026	$1,439
Amounts attributable to PPG			
Income from continuing operations, net of tax	$1,270	$1,028	$1,420
(Loss)/income from discontinued operations, net of tax	—	(2)	19
Net income (attributable to PPG)	$1,270	$1,026	$1,439
Earnings per common share			
Income from continuing operations, net of tax	$5.38	$4.35	$5.98
(Loss)/income from discontinued operations, net of tax	—	(0.01)	0.08
Net income (attributable to PPG)	$5.38	$4.34	$6.06
Earnings per common share - assuming dilution			
Income from continuing operations, net of tax	$5.35	$4.33	$5.93
(Loss)/income from discontinued operations, net of tax	—	(0.01)	0.08
Net income (attributable to PPG)	$5.35	$4.32	$6.01

Consolidated Statement of Comprehensive Income

	For the Year		
($ in millions)	***2023***	***2022***	***2021***
Net income attributable to the controlling and noncontrolling interests	$1,309	$1,054	$1,460
Other comprehensive income/(loss), net of tax			
Defined benefit pension and other postretirement benefits	63	206	174
Unrealized foreign currency translation adjustments	509	(279)	(330)
Other comprehensive income/(loss), net of tax	572	(73)	(156)
Total comprehensive income	$1,881	$981	$1,304
Less: amounts attributable to noncontrolling interests:			
Net income	(39)	(28)	(21)
Unrealized foreign currency translation adjustments	(1)	13	5
Comprehensive income attributable to PPG	$1,841	$966	$1,288

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

Consolidated Balance Sheet

($ in millions)	December 31 2023	2022
Assets		
Current assets		
Cash and cash equivalents	$1,514	$1,099
Short-term investments	75	55
Receivables	3,279	3,303
Inventories	2,127	2,272
Other current assets	436	444
Total current assets	$7,431	$7,173
Property, plant and equipment, net	3,644	3,328
Goodwill	6,200	6,078
Identifiable intangible assets, net	2,424	2,414
Deferred income taxes	273	95
Investments	259	244
Operating lease right-of-use assets	832	829
Other assets	584	583
Total	$21,647	$20,744
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	$4,467	$4,087
Restructuring reserves	87	138
Short-term debt and current portion of long-term debt	306	313
Current portion of operating lease liabilities	194	183
Total current liabilities	$5,054	$4,721
Long-term debt	5,748	6,503
Operating lease liabilities	622	636
Accrued pensions	588	566
Other postretirement benefits	450	476
Deferred income taxes	508	501
Other liabilities	654	632
Total liabilities	$13,624	$14,035
Commitments and contingent liabilities (See Note 15)		
Shareholders' equity		
Common stock	$969	$969
Additional paid-in capital	1,202	1,130
Retained earnings	21,500	20,828
Treasury stock, at cost	(13,600)	(13,525)
Accumulated other comprehensive loss	(2,239)	(2,810)
Total PPG shareholders' equity	$7,832	$6,592
Noncontrolling interests	191	117
Total shareholders' equity	$8,023	$6,709
Total	$21,647	$20,744

The accompanying notes to the consolidated financial statements are an integral part of this consolidated statement.

Consolidated Statement of Shareholders' Equity

($ in millions)	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total PPG	Non-controlling Interests	Total
January 1, 2021	$969	$1,008	$19,469	($13,158)	($2,599)	$5,689	$126	$5,815
Net income attributable to controlling and noncontrolling interests	—	—	1,439	—	—	1,439	21	1,460
Other comprehensive loss, net of tax	—	—	—	—	(151)	(151)	(5)	(156)
Cash dividends	—	—	(536)	—	—	(536)	—	(536)
Purchase of treasury stock	—	—	—	(250)	—	(250)	—	(250)
Issuance of treasury stock	—	48	—	22	—	70	—	70
Stock-based compensation activity	—	25	—	—	—	25	—	25
Dividends paid on subsidiary common stock to noncontrolling interests	—	—	—	—	—	—	(6)	(6)
Reductions in noncontrolling interests	—	—	—	—	—	—	(11)	(11)
December 31, 2021	$969	$1,081	$20,372	($13,386)	($2,750)	$6,286	$125	$6,411
Net income attributable to controlling and noncontrolling interests	—	—	1,026	—	—	1,026	28	1,054
Other comprehensive loss, net of tax	—	—	—	—	(60)	(60)	(13)	(73)
Cash dividends	—	—	(570)	—	—	(570)	—	(570)
Purchase of treasury stock	—	—	—	(150)	—	(150)	—	(150)
Issuance of treasury stock	—	36	—	11	—	47	—	47
Stock-based compensation activity	—	10	—	—	—	10	—	10
Dividends paid on subsidiary common stock to noncontrolling interests	—	—	—	—	—	—	(13)	(13)
Reductions in noncontrolling interests	—	—	—	—	—	—	(10)	(10)
Other	—	3	—	—	—	3	—	3
December 31, 2022	$969	$1,130	$20,828	($13,525)	($2,810)	$6,592	$117	$6,709
Net income attributable to controlling and noncontrolling interests	—	—	1,270	—	—	1,270	39	1,309
Other comprehensive income, net of tax	—	—	—	—	571	571	1	572
Cash dividends	—	—	(598)	—	—	(598)	—	(598)
Purchase of treasury stock	—	—	—	(100)	—	(100)	—	(100)
Issuance of treasury stock	—	58	—	25	—	83	—	83
Stock-based compensation activity	—	14	—	—	—	14	—	14
Dividends paid on subsidiary common stock to noncontrolling interests	—	—	—	—	—	—	(21)	(21)
Acquisition of noncontrolling interests	—	—	—	—	—	—	55	55
December 31, 2023	$969	$1,202	$21,500	($13,600)	($2,239)	$7,832	$191	$8,023

The accompanying notes to the consolidated financial statements are an integral part of this consolidated statement.

Consolidated Statement of Cash Flows

($ in millions)	For the Year 2023	2022	2021
Operating activities			
Income from continuing operations	$1,309	$1,056	$1,441
Adjustments to reconcile net income to cash from operations:			
Depreciation and amortization	558	554	561
Pension settlement charge	190	—	50
Asbestos-related claims reserve adjustment	—	—	(133)
Impairment and other related charges, net	160	245	21
Stock-based compensation expense	59	35	57
Deferred income taxes	(183)	(157)	35
Cash contributions to pension plans	(46)	(11)	(10)
Cash used for restructuring actions	(57)	(85)	(77)
Change in certain asset and liability accounts (net of acquisitions):			
Receivables	10	(268)	(63)
Inventories	203	(227)	(279)
Other current assets	(53)	(60)	32
Accounts payable and accrued liabilities	130	(8)	295
Noncurrent assets and liabilities, net	(47)	(136)	(109)
Taxes and interest payable	71	143	(64)
Other	107	(118)	(195)
Cash from operating activities	$2,411	$963	$1,562
Investing activities			
Capital expenditures	($549)	($518)	($371)
Business acquisitions, net of cash balances acquired	(109)	(114)	(2,137)
Proceeds from asset sales	36	117	47
Other	66	54	57
Cash used for investing activities	($556)	($461)	($2,404)
Financing activities			
Proceeds from Term Loan Credit Agreement, net of fees	$550	$—	$1,399
Repayment of Term Loan Credit Agreement	(1,100)	(300)	—
Net (payments on)/proceeds from commercial paper and short-term debt	—	(439)	190
Repayment of Term Loan	—	—	(400)
Proceeds from the issuance of debt, net of discounts and fees	—	1,116	692
Repayment of long-term debt	(300)	—	(847)
Repayment of acquired debt	—	(2)	(207)
Purchase of treasury stock	(86)	(190)	(210)
Dividends paid on PPG common stock	(598)	(570)	(536)
Other	(16)	(24)	12
Cash (used for)/from financing activities	($1,550)	($409)	$93
Effect of currency exchange rate changes on cash and cash equivalents	110	1	(72)
Net increase/(decrease) in cash and cash equivalents	$415	$94	($821)
Cash and cash equivalents, beginning of year	$1,099	$1,005	$1,826
Cash and cash equivalents, end of year	$1,514	$1,099	$1,005
Supplemental disclosures of cash flow information:			
Interest paid, net of amount capitalized	$213	$156	$140
Taxes paid, net of refunds	$495	$452	$491
Supplemental disclosure of noncash investing and financing activities:			
Capital expenditures accrued within Accounts payable and accrued liabilities at year-end	$174	$76	$163
Purchases of treasury stock transacted but not yet settled	$14	$—	$40

The accompanying notes to the consolidated financial statements are an integral part of this consolidated statement.

1. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of PPG Industries, Inc. ("PPG" or the "Company") and all subsidiaries, both U.S. and non-U.S., that it controls. PPG owns more than 50% of the voting stock of most of the subsidiaries that it controls. For those consolidated subsidiaries in which the Company's ownership is less than 100%, the outside shareholders' interests are shown as noncontrolling interests. Investments in companies in which PPG owns 20% to 50% of the voting stock and has the ability to exercise significant influence over operating and financial policies of the investee are accounted for using the equity method of accounting. As a result, PPG's share of income or losses from such equity affiliates is included in the consolidated statement of income and PPG's share of these companies' shareholders' equity is included in Investments on the consolidated balance sheet. Transactions between PPG and its subsidiaries are eliminated in consolidation.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of income and expenses during the reporting period. Such estimates also include the fair value of assets acquired and liabilities assumed resulting from the allocation of the purchase price related to business combinations consummated. Actual outcomes could differ from those estimates.

Revenue Recognition

Revenue is recognized as performance obligations with the customer are satisfied, at an amount that is determined to be collectible. For the sale of products, this generally occurs at the point in time when control of the Company's products transfers to the customer based on the agreed upon shipping terms.

Shipping and Handling Costs

Amounts billed to customers for shipping and handling are reported in Net sales in the consolidated statement of income. Shipping and handling costs incurred by the Company for the delivery of goods to customers are included in Cost of sales, exclusive of depreciation and amortization in the consolidated statement of income.

Selling, General and Administrative Costs

Amounts presented in Selling, general and administrative in the consolidated statement of income are comprised of selling, customer service, distribution and advertising costs, as well as the costs of providing corporate-wide functional support in areas such as finance, law, human resources and planning. Distribution costs pertain to the movement and storage of finished goods inventory at company-owned and leased warehouses and other distribution facilities.

Advertising Costs

Advertising costs are charged to expense as incurred and totaled $285 million, $252 million and $243 million in 2023, 2022 and 2021, respectively.

Research and Development

Research and development costs, which consist primarily of employee-related costs, are charged to expense as incurred.

($ in millions)	***2023***	***2022***	***2021***
Research and development – total	$456	$470	$463
Less: depreciation on research facilities	23	22	24
Research and development, net	$433	$448	$439

Legal Costs

Legal costs, which primarily include costs associated with acquisition and divestiture transactions, general litigation, environmental regulation compliance, patent and trademark protection and other general corporate purposes, are charged to expense as incurred.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to operating losses and tax credit carryforwards as well as differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in Income tax expense in the consolidated statement of income in the period that includes the enactment date.

A valuation allowance is provided against deferred tax assets in situations where PPG determines it is more likely than not such assets will not ultimately be realized.

PPG does not recognize a tax benefit unless it concludes that it is more likely than not that the benefit will be sustained on audit by the taxing authority based solely on the technical merits of the associated tax position. If the recognition threshold is met, PPG recognizes a tax benefit measured at the largest amount of the tax benefit that, in PPG's judgment, is greater than 50 percent likely to be realized. PPG records interest and penalties related to uncertain tax positions in Income tax expense in the consolidated statement of income.

Foreign Currency Translation

The functional currency of most significant non-U.S. operations is their local currency. Assets and liabilities of those operations are translated into U.S. dollars using year-end exchange rates; income and expenses are translated using the average exchange rates for the reporting period. Unrealized foreign currency translation gains and losses are deferred in Accumulated other comprehensive loss on the consolidated balance sheet.

Cash Equivalents

Cash equivalents are highly liquid investments (valued at cost, which approximates fair value) acquired with an original maturity of three months or less.

Short-term Investments

Short-term investments are highly liquid, high credit quality investments (valued at cost plus accrued interest) that have stated maturities of greater than three months to less than one year. The purchases and sales of these investments are classified as Investing activities in the consolidated statement of cash flows.

Marketable Equity Securities

The Company's investment in marketable equity securities is recorded at fair market value and reported as Other current assets and Investments on the consolidated balance sheet with changes in fair market value recorded in income.

Inventories

Inventories are stated at the lower of cost or net realizable value. Most U.S. inventories are stated at cost, using the last-in, first-out ("LIFO") method of accounting, which does not exceed net realizable value. All other inventories are stated at cost, using the first-in, first-out ("FIFO") method of accounting, which does not exceed net realizable value. PPG determines cost using either average or standard factory costs, which approximate actual costs, excluding certain fixed costs such as depreciation and property taxes. Refer to Note 3, "Working Capital Detail" for further information concerning the Company's inventories.

Derivative Financial Instruments

The Company recognizes all derivative financial instruments (a "derivative") as either assets or liabilities at fair value on the consolidated balance sheet. The accounting for changes in the fair value of a derivative depends on the use of the instrument.

For derivative instruments that are designated and qualify as cash flow hedges, the unrealized gains or losses on the derivatives are recorded in the consolidated statement of comprehensive income. Amounts in Accumulated other comprehensive loss on the consolidated balance sheet are reclassified into Income before income taxes in the consolidated statement of income in the same period or periods during which the hedged transactions are recorded in Income before income taxes in the consolidated statement of income.

For derivative instruments that are designated and qualify as fair value hedges, the change in the fair value of the derivatives are reported in Income before income taxes in the consolidated statement of income, offsetting the gain or loss recognized for the change in fair value of the asset, liability, or firm commitment that is being hedged.

For derivatives, debt or other financial instruments that are designated and qualify as net investment hedges, the gains or losses associated with the financial instruments are reported as translation gains or losses in Accumulated other comprehensive loss on the consolidated balance sheet. Gains and losses in Accumulated other comprehensive loss related to hedges of the Company's net investments in foreign operations are reclassified out of Accumulated other comprehensive loss and recognized in Income before income taxes in the consolidated statement of income upon a substantial liquidation, sale or partial sale of such investments or upon impairment of all or a portion of such investments. The cash flow impact of these instruments is classified as Investing activities in the consolidated statement of cash flows.

Changes in the fair value of derivative instruments not designated as hedges for hedge accounting purposes are recognized in Income before income taxes in the consolidated statement of income in the period of change.

Property, Plant and Equipment

Property, plant and equipment is recorded at cost. Depreciation is computed on a straight-line method based on the estimated useful lives of related assets. Accelerated depreciation expense is recorded when facilities or equipment are subject to abnormal economic conditions, restructuring actions or obsolescence.

The cost of significant improvements that add to productive capacity or extend the lives of properties are capitalized. Costs for repairs and maintenance are charged to expense as incurred. When a capitalized asset is retired or otherwise disposed of, the original cost and related accumulated depreciation balance are removed from the accounts and any related gain or loss is recorded in Income before income taxes in the consolidated statement of income. The amortization cost of finance lease assets is recorded in Depreciation expense in the consolidated statement of income. Property and other long-lived assets are reviewed for impairment whenever events or circumstances indicate that their carrying amounts may not be recoverable. Refer to Note 4, “Property, Plant and Equipment” for further details.

Goodwill and Identifiable Intangible Assets

Goodwill represents the excess of the cost over the fair value of acquired identifiable tangible and intangible assets less liabilities assumed from acquired businesses. Identifiable intangible assets acquired in business combinations are recorded based upon their fair value at the date of acquisition.

PPG is a multinational manufacturer with 10 operating segments (which the Company refers to as “strategic business units”) that are organized based on the Company’s major products lines. These operating segments are also the Company’s reporting units for purposes of testing goodwill for impairment, which is tested at least annually in connection with PPG’s strategic planning process or more frequently if an indication of impairment exists. The Company tests goodwill for impairment by either performing a qualitative evaluation or a quantitative test. The qualitative evaluation is an assessment of factors, including reporting unit specific operating results as well as industry, market and general economic conditions, to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. The Company may elect to bypass this qualitative assessment for some or all of its reporting units and perform a quantitative test. Quantitative goodwill impairment testing, if deemed necessary, is performed during the fourth quarter of each year by comparing the estimated fair value of an associated reporting unit as of September 30 to its carrying value. Fair value is estimated using a discounted cash flow model. Key assumptions and estimates used in the discounted cash flow model include projected future revenues, discount rates, operating cash flows, capital expenditures and tax rates. In 2023, the Company determined that the estimated fair value of the traffic solutions reporting unit was less than its carrying value, resulting in recognition of a goodwill impairment charge of $158 million in Impairment and other related charges, net in the accompanying consolidated statement of income. Refer to Note 6, “Goodwill and Other Identifiable Intangible Assets” for further details.

The Company has determined that certain acquired trademarks have indefinite useful lives. The Company tests the carrying value of these trademarks for impairment at least annually, or as needed whenever events and circumstances indicate that their carrying amount may not be recoverable. In 2022, due to the adverse economic impacts of Russian military forces invading Ukraine, the Company identified indicators that the carrying value of an indefinite-lived intangible asset and certain definite-lived intangible assets associated with the Company's operations in Russia may not be recoverable, and the carrying value of those assets was assessed for impairment. As a result of this assessment, the Company recorded impairment charges of $124 million related to the indefinite-lived intangible asset and $23 million related to definite-lived intangible assets in the consolidated statement of income for the year ended December 31, 2022. Refer to Note 7, "Impairment and Other Related Charges, Net" for additional information.

The annual indefinite-lived intangible asset impairment assessment takes place in the fourth quarter of each year either by completing a qualitative assessment or quantitatively by comparing the estimated fair value of each trademark as of September 30 to its carrying value. Fair value is estimated using the relief from royalty method (a discounted cash flow methodology). The qualitative assessment includes consideration of factors, including revenue relative to the asset being assessed, the operating results of the related business and industry, market and general economic conditions, to determine whether it is more likely than not that the fair value of the asset is less than its carrying amount. In 2023, the annual impairment testing review of indefinite-lived intangibles performed as of September 30, 2023 resulted in the Company recognizing an impairment charge of $2 million. Refer to Note 6, “Goodwill and Other Identifiable Intangible Assets” for further details.

Identifiable intangible assets with finite lives are amortized on a straight-line basis over their estimated useful lives (1 to 30 years) and are reviewed for impairment whenever events or circumstances indicate that their carrying amount may not be recoverable.

Receivables and Allowances

All trade receivables are reported on the consolidated balance sheet at the outstanding principal adjusted for any allowance for doubtful accounts and any charge offs. The Company provides an allowance for doubtful accounts to

reduce receivables to their estimated net realizable value when it is probable that a loss will be incurred. Those estimates are based on historical collection experience, current regional economic and market conditions, the aging of accounts receivable, assessments of current creditworthiness of customers, and forward-looking information. Refer to Note 20, “Revenue Recognition” for further details.

Supply Chain Finance

PPG has certain voluntary supply chain finance programs with financial intermediaries which provide participating suppliers the option to be paid by the intermediary earlier than the original invoice due date. PPG’s responsibility is limited to making payments on the terms originally negotiated with the suppliers, regardless of whether the intermediary pays the supplier in advance of the original due date. The range of payment terms PPG negotiates with suppliers are consistent, regardless of whether a supplier participates in a supply chain finance program. The total amount due to financial intermediaries to settle supplier invoices under supply chain finance programs was $301 million and $390 million as of December 31, 2023 and December 31, 2022, respectively. These amounts are included within Accounts payable and accrued liabilities on the accompanying consolidated balance sheet.

Leases

The Company determines if a contract is a lease at the inception of the arrangement. The Company reviews all options to extend, terminate, or purchase its right of use assets at the inception of the lease and accounts for these options when they are reasonably certain of being exercised. Certain real estate leases contain lease and non-lease components, which are accounted for separately. For certain equipment leases, lease and non-lease components are accounted for as a single lease component.

Leases with an initial term of 12 months or less are not recorded on the consolidated balance sheet. Lease expense for these leases is recognized on a straight-line basis over the lease term.

Variable lease expense is based on contractual arrangements with PPG’s lessors determined based on external indices or other relevant market factors. In addition, PPG’s variable lease expense also includes elements of a contract that do not represent a good or service but for which the lessee is responsible for paying.

Nearly all of PPG’s lease contracts do not provide a readily determinable implicit rate. For these contracts, PPG’s estimated incremental borrowing rate is based on information available at the inception of the lease.

Product Warranties

The Company accrues for product warranties at the time the associated products are sold based on historical claims experience. The reserve, pretax charges against income and cash outlays for product warranties were not significant to the consolidated financial statements of the Company for any year presented.

Asset Retirement Obligations

An asset retirement obligation represents a legal obligation associated with the retirement of a tangible long-lived asset that is incurred upon the acquisition, construction, development or normal operation of that long-lived asset. PPG recognizes asset retirement obligations in the period in which they are incurred if a reasonable estimate of fair value can be made. The asset retirement obligation is subsequently adjusted for changes in fair value. The associated estimated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset and depreciated over its useful life. PPG’s asset retirement obligations are primarily associated with the retirement or closure of certain assets used in PPG’s manufacturing process. The accrued asset retirement obligation is recorded in Accounts payable and accrued liabilities and Other liabilities on the consolidated balance sheet and was $23 million as of both December 31, 2023 and 2022.

PPG’s only conditional asset retirement obligation relates to the possible future abatement of asbestos contained in certain PPG production facilities. The asbestos in PPG’s production facilities arises from the application of normal and customary building practices in the past when the facilities were constructed. This asbestos is encapsulated in place and, as a result, there is no current legal requirement to abate it. Because there is no requirement to abate, the Company does not have any current plans or an intention to abate and therefore the timing, method and cost of future abatement, if any, are not known. The Company has not recorded an asset retirement obligation associated with asbestos abatement, given the uncertainty concerning the timing of future abatement, if any.

Environmental Contingencies

It is PPG’s policy to accrue expenses for environmental contingencies when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Reserves for environmental contingencies are exclusive of claims against third parties and are generally not discounted.

Assets and Liabilities Held for Sale

The Company classifies assets and liabilities as held for sale (a “disposal group”) when management commits to a plan to sell the disposal group, the sale is probable within one year and the disposal group is available for immediate sale in its present condition. The Company considers various factors, particularly whether actions required to complete the plan indicate it is unlikely that significant changes to the plan will be made or the plan will be withdrawn. Assets held for sale are measured at the lower of carrying value or fair value less costs to sell. Any loss resulting from the measurement is recognized in the period the held-for-sale criteria are met. Conversely, gains are not recognized until the date of the sale. When the disposal group is classified as held for sale, depreciation and amortization ceases and the Company tests the assets for impairment.

Reclassifications

Certain reclassifications of prior years’ data have been made to conform to the current year presentation. These reclassifications had no impact on our previously reported Net income, cash flows or shareholders’ equity.

Accounting Standards Adopted in 2023

Effective January 1, 2023, PPG adopted Accounting Standards Update ("ASU") No. 2022-04, “Liabilities - Supplier Finance Programs." This ASU is intended to enhance the transparency surrounding the use of supplier finance programs. The guidance does not affect the recognition, measurement, or financial statement presentation of obligations covered by supplier finance programs.

Accounting Standards to be Adopted in Future Years

In November 2023, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2023-07 “Improvements to Reportable Segment Disclosures (Topic 280)”. This ASU updates current reportable segment disclosure requirements to require disclosures of significant reportable segment expenses that are regularly provided to the Chief Operating Decision Maker (“CODM”) and included within each reported measure of a segment's profit or loss. This ASU also requires disclosure of the title and position of the individual identified as the CODM and an explanation of how the CODM uses the reported measures of a segment’s profit or loss in assessing segment performance and deciding how to allocate resources. This ASU will be effective for the annual period ending December 31, 2024. Adoption of this ASU will result in additional disclosure, but will not impact PPG’s consolidated financial position, results of operations or cash flows.

In December 2023, the FASB issued ASU No. 2023-09 “Improvements to Income Tax Disclosures (Topic 740)”. This ASU updates current income tax disclosure requirements to require disclosures of specific categories of information within the effective tax rate reconciliation, as well as disclosure of income taxes paid disaggregated by jurisdiction. This ASU will be effective for the annual period ending December 31, 2025. Adoption of this ASU will result in additional disclosure, but will not impact PPG’s consolidated financial position, results of operations or cash flows.

2. Acquisitions

The pro-forma impact of the following acquisition on PPG’s sales and results of operations, including the pro-forma effect of events that are directly attributable to this acquisition, was not significant.

Tikkurila

On June 10, 2021, PPG completed its tender offer for all of the outstanding shares of Tikkurila Oyj ("Tikkurila"). Tikkurila is a leading Nordic producer and distributor of decorative paint and coatings, including an industrial paint business that produces paints and coatings for the wood and metal industries, among others. Immediately prior to the June 10, 2021 acquisition date, PPG owned 9.3% of Tikkurila’s issued and outstanding shares. Immediately following the acquisition date, PPG owned 97.1% of Tikkurila’s issued and outstanding shares. PPG continued to acquire the remaining shares not tendered during the tender offer period through a squeeze out process, ultimately achieving 100% ownership of Tikkurila’s outstanding shares during the fourth quarter of 2021.

The results of this business since the date of acquisition have been reported within two operating segments: the architectural coatings – EMEA business and the industrial coatings business. The architectural coatings – EMEA business is included within the Performance Coatings reportable business segment and the industrial coatings business is included within the Industrial Coatings reportable business segment.

3. Working Capital Detail

($ in millions)	2023	2022
Receivables		
Trade - net	$2,881	$2,824
Other - net	398	479
Total	$3,279	$3,303
Inventories[1]		
Finished products	$1,197	$1,209
Work in process	236	238
Raw materials	640	784
Supplies	54	41
Total	$2,127	$2,272
Accounts payable and accrued liabilities		
Trade	$2,612	$2,538
Accrued payroll	674	501
Customer rebates	414	377
Other postretirement and pension benefits	96	77
Income taxes	128	37
Other	543	557
Total	$4,467	$4,087

(1) Inventories valued using the LIFO method of inventory valuation comprised 20% and 21% of total gross inventory values as of December 31, 2023 and 2022, respectively. If the FIFO method of inventory valuation had been used, inventories would have been $249 million and $272 million higher as of December 31, 2023 and 2022, respectively.

4. Property, Plant and Equipment

($ in millions)	Useful Lives (years)	2023	2022
Land and land improvements	1-30	$572	$548
Buildings	20-40	1,908	1,774
Machinery and equipment	5-25	4,157	3,960
Other	3-20	1,287	1,203
Construction in progress		683	492
Total		$8,607	$7,977
Less: accumulated depreciation		4,963	4,649
Net		$3,644	$3,328

5. Investments

($ in millions)	2023	2022
Investments in equity affiliates	$141	$134
Marketable equity securities (See Note 11)	74	61
Other	44	49
Total	$259	$244

Investments in equity affiliates represent PPG's ownership interests in entities between 20% and 50% that manufacture and sell coatings and certain chemicals.

PPG's share of undistributed net earnings of equity affiliates was $21 million, $25 million and $15 million in 2023, 2022 and 2021, respectively. Dividends received from equity affiliates were $17 million, $17 million and $9 million in 2023, 2022 and 2021, respectively.

6. Goodwill and Other Identifiable Intangible Assets

Goodwill

($ in millions)	*Performance Coatings*	*Industrial Coatings*	*Total*
January 1, 2022	$5,034	$1,214	$6,248
Acquisitions, including purchase accounting adjustments	31	15	46
Divestitures	(40)	—	(40)
Foreign currency impact	(144)	(32)	(176)
December 31, 2022	$4,881	$1,197	$6,078
Acquisitions, including purchase accounting adjustments	126	13	139
Divestitures	(5)	—	(5)
Foreign currency impact	150	(4)	146
Goodwill impairment	(158)	—	(158)
December 31, 2023	$4,994	$1,206	$6,200

In the fourth quarter, the Company tests the carrying value of goodwill for impairment, as discussed in Note 1. “Summary of Significant Accounting Policies.” Based on the annual goodwill impairment test performed in the fourth quarter 2023, the Company determined that the estimated fair value of the traffic solutions reporting unit was less than its carrying value, resulting in recognition of a goodwill impairment charge of $158 million in Impairment and other related charges, net in the accompanying consolidated statements of income. After recording the goodwill impairment charge of $158 million, the remaining goodwill balance recorded for the traffic solutions reporting unit was $391 million as of December 31, 2023. The fair value of the traffic solutions reporting unit was estimated using a discounted cash flow model. Key assumptions and estimates used in the discounted cash flow model included projected future revenues, a discount rate, operating cash flows, capital expenditures, and a tax rate. The decline in the fair value of the traffic solutions reporting unit compared to prior periods was primarily due to an increase in the weighted average cost of capital (discount rate assumption) reflecting the current interest rate environment. In addition, the fair value was impacted by a decline in the reporting unit’s long-term cash generation forecast due to the highly inflationary environment in Argentina and the fourth quarter 2023 divestitures of its European and Australian businesses.

In 2022 and 2021, the annual impairment testing of goodwill did not result in impairment of any of the Company’s reporting units. As of December 31, 2023, accumulated goodwill impairment losses totaled $158 million.

Identifiable Intangible Assets

	December 31, 2023			*December 31, 2022*		
($ in millions)	*Gross Carrying Amount*	*Accumulated Amortization*	*Net*	*Gross Carrying Amount*	*Accumulated Amortization*	*Net*
Indefinite-Lived Identifiable Intangible Assets						
Trademarks	$1,442	$—	$1,442	$1,325	$—	$1,325
Definite-Lived Identifiable Intangible Assets						
Acquired technology	$845	($678)	$167	$827	($636)	$191
Customer-related	1,933	(1,259)	674	1,855	(1,112)	743
Trade names	319	(180)	139	311	(158)	153
Other	50	(48)	2	50	(48)	2
Total Definite Lived Intangible Assets	$3,147	($2,165)	$982	$3,043	($1,954)	$1,089
Total Identifiable Intangible Assets	$4,589	($2,165)	$2,424	$4,368	($1,954)	$2,414

In the fourth quarter, the Company tests the carrying value of indefinite-lived trademarks for impairment, as discussed in Note 1, “Summary of Significant Accounting Policies.” In conjunction with both the 2023 and 2022 annual impairment tests, the Company determined that the estimated fair value of certain trademarks in the Performance Coatings segment was less than the carrying value, resulting in recognition of impairment charges of $2 million and $4 million, respectively, in Impairment and other related charges, net in the accompanying consolidated statement of income. In 2021, the annual impairment testing review of indefinite-lived intangibles did not result in an impairment.

In the first quarter 2022, due to the adverse economic impacts of the Russian invasion in Ukraine, the Company recognized $147 million of Impairment and other related charges, net in the consolidated statement of income related to certain definite-lived and indefinite-lived intangible assets in the Performance Coatings segment. Refer to Note 7, “Impairment and Other Related Charges, Net” for further details.

Aggregate amortization expense was $167 million, $166 million and $172 million in 2023, 2022 and 2021, respectively. In the fourth quarter 2023, the Company recognized accelerated amortization expense of $6 million related to the exit of a non-core business.

($ in millions)	*2024*	*2025*	*2026*	*2027*	*2028*
Estimated future amortization expense	$147	$128	$107	$96	$83

7. Impairment and Other Related Charges, Net

In 2023, the Company recorded a goodwill impairment charge for the traffic solutions reporting unit and indefinite-lived intangible asset impairment charges related to certain trademarks. In 2022, the Company recorded indefinite-lived intangible asset impairment charges for certain trademarks. Refer to Note 6, “Goodwill and Intangible Assets” for further detail related to these charges, which are included in Impairment and other related charges, net in the accompanying consolidated statement of income.

Wind Down of Russia Operations

In the first quarter 2022, Russian military forces invaded Ukraine. This military action had significant and immediate adverse economic impacts on businesses operating in Russia and Ukraine. Based on deteriorating business conditions and regulatory restrictions, including the impact of economic sanctions imposed on Russia by the United States, the European Union and other governments, PPG immediately ceased sales to Russian state-owned entities, announced that the Company would cease all new investments in Russia and commenced actions to wind down most of the Company’s operations in Russia.

Based on this change in facts and circumstances, the long-term cash flow forecast for the Company’s operations in Russia was significantly reduced. This reduction in the long-term cash flow forecast indicated that the carrying amounts of long-lived assets and certain indefinite-lived intangible assets associated with the Company’s operations in Russia may not be recoverable, and the carrying value of these assets was tested for impairment. Additionally, the Company evaluated trade receivables for estimated future credit losses, inventories for declines in net realizable value and other current assets for impairment in light of the deteriorating economic conditions in Russia and Ukraine. As a result, during the three months ended March 31, 2022, the Company recognized $290 million of Impairment and other related charges, net in the consolidated statement of income, comprised of $201 million of long-lived asset impairment charges and $89 million of other related charges.

The $201 million of long-lived asset impairment charges recorded during first quarter 2022 was comprised of $124 million related to indefinite-lived intangible assets, $54 million related to property, plant and equipment, net and $23 million related to definite-lived intangible assets. The $89 million of other related charges represented reserves established for receivables and other current assets and the write-down of inventories impacted by the adverse economic consequences of the Russian invasion of Ukraine.

Subsequently, the Company released a portion of the previously established reserves due to the collection of certain trade receivables and recorded recoveries due to the realization of certain previously written-down inventories, resulting in recognition of income of $63 million within Impairment and other related charges, net.

The Company divested its legacy industrial Russian operations during 2023 and continues to diligently work towards exiting Russia, including a possible sale of its remaining Russian business or controlled withdrawal from the Russia market.

During both the years ended December 31, 2023 and 2022, net sales in Russia represented approximately 1% of PPG net sales.

Businesses Classified as Held for Sale

The Company recorded impairment charges of $14 million and $21 million in Impairment and other related charges, net in the consolidated statement of income for the years ended December 31, 2022 and 2021, respectively, related to certain smaller, non-strategic businesses. PPG committed to plans to sell these business and they were reclassified as held for sale. The revenue of these businesses represents less than 1% of PPG annual net sales. The impairment charges recorded represent the excess net book value of the net assets over the anticipated sales proceeds less costs to sell. The Company did not record any impairment charges related to businesses classified as held for sale during 2023.

8. Business Restructuring

The Company records restructuring liabilities that represent charges incurred in connection with consolidations of certain operations, including operations from acquisitions, as well as headcount reduction programs. These charges consist primarily of severance costs and certain other cash costs. As a result of these programs, the Company will also incur incremental non-cash accelerated depreciation expense for certain assets due to their reduced expected asset life. These charges are not allocated to the Company's reportable business segments. Refer to Note 21, "Reportable Business Segment Information" for additional information.

In 2023, the Company approved business restructuring actions to reduce costs and improve the profitability of the overall business portfolio. The majority of these restructuring actions are expected to be completed by the end of 2024.

In 2022, the Company approved a business restructuring plan which included actions to reduce its global cost structure in response to current economic conditions, including softening demand in Europe and lower than expected demand recovery in China. The Company performed a comprehensive evaluation to identify opportunities to reduce costs and improve the profitability of the overall business portfolio. The program includes actions to right-size employee headcount, reductions in functional and administrative costs and other cost savings actions. The majority of these restructuring actions are expected to be completed by the end of 2024.

In 2021, the Company approved business restructuring actions related to recent acquisitions targeting further consolidation of its manufacturing footprint and headcount reductions. The majority of these restructuring actions are expected to be completed by the end of 2024.

The following table summarizes restructuring reserve activity for the years ended December 31, 2023 and 2022:

	Total Reserve	
($ in millions)	***2023***	***2022***
January 1	$169	$231
Approved restructuring actions	33	84
Release of prior reserves and other adjustments[(a)]	(35)	(51)
Cash payments	(57)	(85)
Foreign currency impact	3	(10)
December 31	$113	$169

(a) Certain releases were recorded to reflect the current estimate of costs to complete planned business restructuring actions.

9. Leases

PPG leases certain retail paint stores, warehouses, distribution facilities, office space, fleet vehicles and equipment.

The components of lease expense for the years ended December 31, 2023, 2022 and 2021 were as follows:

($ in millions)	***Classification in the Consolidated Statement of Income***	***2023***	***2022***	***2021***
Operating lease cost	Cost of sales, exclusive of depreciation and amortization	$46	$43	$41
Operating lease cost	Selling, general and administrative	220	216	219
Total operating lease cost		$266	$259	$260
Finance lease cost:				
Amortization of right-of-use assets	Depreciation	$2	$2	$2
Interest on lease liabilities	Interest expense	1	1	1
Total finance lease cost		$3	$3	$3
Total lease cost		$269	$262	$263

Total operating lease cost for the years ended December 31, 2023, 2022 and 2021 is inclusive of the following:

($ in millions)	***2023***	***2022***	***2021***
Variable lease costs	$20	$18	$18
Short-term lease costs	$20	$22	$16

The lease amounts included in the consolidated balance sheet as of December 31, 2023 and 2022 were as follows:

($ in millions)	***Classification on the Consolidated Balance Sheet***	***2023***	***2022***
Assets:			
Operating	Operating lease right-of-use assets	$832	$829
Finance[(1)]	Property, plant, and equipment, net	14	15
Total leased assets		$846	$844
Liabilities:			
Current			
Operating	Current portion of operating lease liabilities	$194	$183
Finance	Short-term debt and current portion of long-term debt	2	3
Noncurrent			
Operating	Operating lease liabilities	$622	$636
Finance	Long-term debt	6	7
Total lease liabilities		$824	$829

(1) Net of accumulated depreciation of $15 million and $14 million as of December 31, 2023 and 2022, respectively.

Supplemental cash flow information related to leases for the years ended December 31, 2023, 2022 and 2021 was as follows:

($ in millions)	***2023***	***2022***	***2021***
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows paid for operating leases	$224	$218	$224
Operating cash flows paid for finance leases	$1	$1	$1
Financing cash flows paid for finance leases	$3	$2	$3
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	$174	$161	$253
Finance leases	$1	$3	$—

Lease terms and discount rates as of December 31, 2023, 2022 and 2021 were as follows:

	2023	***2022***	***2021***
Weighted-average remaining lease term (in years)			
Operating leases	6.2	6.7	7.1
Finance leases	9.5	9.0	6.4
Weighted-average discount rate			
Operating leases	3.2 %	2.6 %	2.1 %
Finance leases	5.9 %	5.7 %	5.8 %

As of December 31, 2023, maturities of lease liabilities were as follows:

($ in millions)	***Operating Leases***	***Finance Leases***
2024	$216	$2
2025	176	2
2026	137	2
2027	103	1
2028	80	1
Thereafter	184	1
Total lease payments	$896	$9
Less: Interest	80	1
Total lease obligations	$816	$8

10. Borrowings and Lines of Credit

Long-term Debt Obligations

($ in millions)	*Maturity Date*	*2023*	*2022*
3.2% notes ($300)[1]	2023	$—	$300
Term Loan Credit Agreement, due 2024 ($1,400)	2024	—	1,099
2.4% notes ($300)	2024	299	299
0.875% notes (€600)	2025	660	639
1.875% notes (€300)	2025	330	319
1.2% notes ($700)	2026	696	694
Term Loan Credit Agreement, due 2026 (€500)	2026	552	—
1.4% notes (€600)	2027	659	638
3.75% notes ($800)[2]	2028	808	809
2.5% notes (€80)	2029	87	85
2.8% notes ($300)	2029	298	298
2.75% notes (€700)	2029	768	743
2.55% notes ($300)	2030	297	297
1.95% note (€50)	2037	54	52
7.7% notes ($176)	2038	174	174
5.5% notes ($250)	2040	247	247
3.0% notes (€120)	2044	126	122
Various other non-U.S. debt	Various	1	1
Finance lease obligations	Various	8	10
Impact of derivatives on debt[3]	N/A	(14)	(20)
Total		$6,050	$6,806
Less payments due within one year	N/A	302	303
Long-term debt		$5,748	$6,503

(1) In February 2018, PPG entered into interest rate swaps which converted $150 million of the notes from a fixed interest rate to a floating interest rate based on the three month London Interbank Offered Rate (LIBOR). The impact of the derivative on the notes represents the fair value adjustment of the debt. The average effective interest rate for the portion of the notes impacted by the swaps was 5.1% and 2.2% for the years ended December 31, 2023 and 2022, respectively. In March 2023 the obligation was repaid and the associated interest rate swaps were settled. Refer to Note 11, “Financial Instruments, Hedging Activities and Fair Value Measurements” for additional information.

(2) In February 2018, PPG entered into interest rate swaps which converted $375 million of the notes from a fixed interest rate to a floating interest rate based on the three month LIBOR. The impact of the derivative on the notes represents the fair value adjustment of the debt. The average effective interest rate for the portion of the notes impacted by the swaps was 6.2% and 2.6% for the years ended December 31, 2023 and 2022, respectively. Refer to Note 11, “Financial Instruments, Hedging Activities and Fair Value Measurements” for additional information.

(3) Fair value adjustment of the 3.2% $300 million notes and 3.75% $800 million notes as a result of fair value hedge accounting treatment related to the outstanding interest rate swaps as of December 31, 2023 and 2022, respectively. In March 2023, the 3.2% $300 million notes were repaid and the associated interest rate swaps were settled. Refer to Note 11, “Financial Instruments, Hedging Activities and Fair Value Measurements” for additional information.

Credit Agreements

In April 2023, PPG entered into a €500 million term loan credit agreement (the "Term Loan"). The Term Loan provides the Company with the ability to increase the size of the loan by an amount not to exceed €250 million. The Term Loan contains covenants that are consistent with those in the Credit Agreement discussed below and that are usual and customary restrictive covenants for facilities of its type, which include, with specified exceptions, limitations on the Company’s ability to create liens or other encumbrances, to enter into sale and leaseback transactions and to enter into consolidations, mergers or transfers of all or substantially all of its assets. The Term Loan terminates and all amounts outstanding are payable in April 2026. In April 2023, PPG borrowed €500 million under the Term Loan. In December 2023, PPG obtained lender commitments sufficient to increase the size of the Term Loan by €250 million. In January 2024, PPG borrowed the additional €250 million. The Term Loan is denominated in euro and has been designated as a hedge of the net investment in the Company’s European operations. For more information, refer to Note 11 “Financial Instruments, Hedging Activities and Fair Value Measurements.”

In March 2023, PPG amended its five-year credit agreement (the “Credit Agreement”) dated as of August 30, 2019. The amendments to the Credit Agreement replace the LIBOR-based reference interest rate option with a reference interest rate option based upon Term SOFR. The other terms of the Credit Agreement remained unchanged. In July 2023, PPG amended and restated the Credit Agreement, extending the term through July 27, 2028. The amended and restated Credit Agreement provides for a $2.3 billion unsecured revolving credit facility. The Company has the ability to increase the size of the Credit Agreement by up to an additional $750 million, subject to the receipt of lender commitments and other conditions precedent. The Company has the right, subject to certain conditions set forth in the Credit Agreement, to designate certain subsidiaries of the Company as borrowers under the Credit Agreement. In connection with any such

designation, the Company is required to guarantee the obligations of any such subsidiaries under the Credit Agreement. There were no amounts outstanding under the Credit Agreement as of December 31, 2023 and December 31, 2022.

Borrowings under the Credit Agreement may be made in U.S. Dollars or in euros. The Credit Agreement provides that loans will bear interest at rates based, at the Company's option, on one of two specified base rates plus a margin based on certain formulas defined in the Credit Agreement. Additionally, the Credit Agreement contains a Commitment Fee, as defined in the Credit Agreement, on the amount of unused commitments under the Credit Agreement ranging from 0.060% to 0.125% per annum.

The Credit Agreement also supports the Company's commercial paper borrowings which are classified as long-term based on PPG's intent and ability to refinance these borrowings on a long-term basis. There were no commercial paper borrowings outstanding as of both December 31, 2023 and December 31, 2022.

The Credit Agreement contains usual and customary restrictive covenants for facilities of its type, which include, with specified exceptions, limitations on the Company's ability to create liens or other encumbrances, to enter into sale and leaseback transactions and to enter into consolidations, mergers or transfers of all or substantially all of its assets. The Credit Agreement also requires the Company to maintain a ratio of Total Indebtedness to Total Capitalization, as defined in the Credit Agreement, of 60% or less; provided, that for any fiscal quarter in which the Company has made an acquisition for consideration in excess of $1 billion and for the next five fiscal quarters thereafter, the ratio of Total Indebtedness to Total Capitalization may not exceed 65% at any time. As of December 31, 2023, Total Indebtedness to Total Capitalization as defined under the Credit Agreement was 42%.

The Credit Agreement contains, among other things, customary events of default that would permit the lenders to accelerate the loans, including the failure to make timely payments when due under the Credit Agreement or other material indebtedness, the failure to satisfy covenants contained in the Credit Agreement, a change in control of the Company and specified events of bankruptcy and insolvency.

Other Long-term Debt Activities

In March 2023, PPG's $300 million 3.2% notes matured, and the Company repaid this obligation using cash on hand.

In May 2022, PPG completed a public offering of €300 million 1.875% Notes due 2025 and €700 million 2.750% Notes due 2029. These notes were issued pursuant to PPG's existing shelf registration statement and pursuant to an indenture between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee, as supplemented (the "2022 Indenture"). The 2022 Indenture governing these notes contains covenants that limit the Company's ability to, among other things, incur certain liens securing indebtedness, engage in certain sale-leaseback transactions, and enter into certain consolidations, mergers, conveyances, transfers or leases of all or substantially all the Company's assets. The terms of these notes also require the Company to make an offer to repurchase Notes upon a Change of Control Triggering Event (as defined in the 2022 Indenture) at a price equal to 101% of their principal amount plus accrued and unpaid interest. The Company may issue additional debt from time to time pursuant to the Indenture. The aggregate cash proceeds from the notes, net of discounts and fees, was $1,061 million. The notes are denominated in euro and have been designated as hedges of net investments in the Company's European operations. Refer to Note 11 "Financial Instruments, Hedging Activities and Fair Value Measurements." for additional information.

In March 2022, PPG privately placed a 15-year €50 million 1.95% fixed interest note. This note contains covenants materially consistent with the 1.200% notes discussed below. This debt arrangement is denominated in euros and has been designated as a net investment hedge of the Company's European operations. Refer to Note 11 "Financial Instruments, Hedging Activities and Fair Value Measurements" for additional information.

In December 2021, PPG completed an early redemption of the €600 million 0.875% notes due March 2022 using cash on hand.

In the second quarter of 2021, two of PPG's long-term debt obligations matured; $134 million 9% non-callable debentures and non-U.S. debt of €30 million. The Company paid $170 million to settle these obligations using cash on hand.

In March 2021, PPG completed a public offering of $700 million aggregate principal amount of 1.200% notes due 2026. These notes were issued pursuant to PPG's existing shelf registration statement and pursuant to the Indenture between the Company and the Bank of New York Mellon Trust Company, N.A., as trustee, as supplemented (the "2021 Indenture"). The 2021 Indenture governing these notes contains covenants that limit the Company's ability to, among other things, incur certain liens securing indebtedness, engage in certain sale-leaseback transactions, and enter into certain consolidations, mergers, conveyances, transfers or leases of all or substantially all the Company's assets. The terms of these notes also require the Company to make an offer to repurchase the notes upon a Change of Control Triggering Event (as defined in the 2021 Indenture) at a price equal to 101% of their principal amount plus accrued and unpaid interest. The Company may issue additional debt from time to time pursuant to the 2021 Indenture. The aggregate cash proceeds from the notes, net of discounts and fees, was $692 million.

In February 2021, PPG entered into a $2.0 billion Term Loan Credit Agreement (the "Term Loan Credit Agreement") to finance the Company's acquisition of Tikkurila, and to pay fees, costs and expenses related thereto. The Term Loan Credit Agreement provided the Company with the ability to borrow up to an aggregate principal amount of $2.0 billion on an unsecured basis. In addition to the amounts borrowed to finance the acquisition of Tikkurila, the Term Loan Credit Agreement allowed the Company to make up to eleven additional borrowings prior to December 31, 2021, to be used for working capital and general corporate purposes. The Term Loan Credit Agreement contains covenants that are consistent with those in the Credit Agreement discussed below and that are usual and customary restrictive covenants for facilities of its type, which include, with specified exceptions, limitations on the Company's ability to create liens or other encumbrances, to enter into sale and leaseback transactions and to enter into consolidations, mergers or transfers of all or substantially all of its assets. The Term Loan Credit Agreement matures and all outstanding borrowings are due and payable on the third anniversary of the date of the initial borrowing under the Agreement. In June 2021, PPG borrowed $700 million under Term Loan Credit Agreement to finance the Company's acquisition of Tikkurila, and to pay fees, costs and expenses related thereto. In December 2021, PPG borrowed an additional $700 million under the Term Loan Credit Agreement. In March 2023, PPG amended the Term Loan Credit Agreement to replace the LIBOR-based reference interest rate option with a reference interest rate option based upon Term Secured Overnight Financing Rate ("SOFR"). The other terms of the Term Loan Credit Agreement remain unchanged. In 2022 and 2023, PPG repaid $300 million and $1.1 billion, respectively, of the Term Loan Credit Agreement using cash on hand. The Term Loan Credit Agreement was fully repaid as of December 31, 2023. Borrowings of $1.1 billion were outstanding under the Term Loan Credit Agreement as of December 31, 2022.

Restrictive Covenants and Cross-Default Provisions

As of December 31, 2023, PPG was in full compliance with the restrictive covenants under its various credit agreements, loan agreements and indentures.

Additionally, the Company's Credit Agreement contains customary cross-default provisions. These provisions provide that a default on a debt service payment of $100 million or more for longer than the grace period provided under another agreement may result in an event of default under this agreement. None of the Company's primary debt obligations are secured or guaranteed by the Company's affiliates.

Long-term Debt Maturities

($ in millions)	***Maturity per year***
2024	$302
2025	$989
2026	$1,250
2027	$662
2028	$784
Thereafter	$2,063

Short-term Debt Obligations

($ in millions)	***2023***	***2022***
Various, weighted average 2.4% and 2.7% as of December 31, 2023 and 2022, respectively.	$4	$10

Lines of Credit, Letters of Credit and Surety Bonds

PPG's non-U.S. operations have uncommitted lines of credit totaling $491 million of which none was used as of December 31, 2023. These uncommitted lines of credit are subject to cancellation at any time and are generally not subject to any commitment fees.

The Company had outstanding letters of credit and surety bonds of $232 million and $231 million as of December 31, 2023 and 2022, respectively. The letters of credit secure the Company's performance to third parties under certain self-insurance programs and other commitments made in the ordinary course of business. The Company does not believe any loss related to these letters of credit or surety bonds is likely.

11. Financial Instruments, Hedging Activities and Fair Value Measurements

Financial instruments include cash and cash equivalents, short-term investments, cash held in escrow, marketable equity securities, accounts receivable, company-owned life insurance, accounts payable, short-term and long-term debt instruments, and derivatives. The fair values of these financial instruments approximated their carrying values at December 31, 2023 and 2022, in the aggregate, except for long-term debt instruments.

Hedging Activities

The Company has exposure to market risk from changes in foreign currency exchange rates and interest rates. As a result, financial instruments, including derivatives, have been used to hedge a portion of these underlying economic exposures. Certain of these instruments qualify as fair value, cash flow, and net investment hedges upon meeting the requisite criteria, including effectiveness of offsetting hedged or underlying exposures. Changes in the fair value of derivatives that do not qualify for hedge accounting are recognized in Income before income taxes in the period incurred.

PPG's policies do not permit speculative use of derivative financial instruments. PPG enters into derivative financial instruments with high credit quality counterparties and diversifies its positions among such counterparties in order to reduce its exposure to credit losses. The Company did not realize a credit loss on derivatives during the three-year period ended December 31, 2023.

All of PPG's outstanding derivative instruments are subject to accelerated settlement in the event of PPG's failure to meet its debt or payment obligations under the terms of the instruments' contractual provisions. In addition, if the Company would be acquired and its payment obligations under its derivative instruments' contractual arrangements are not assumed by the acquirer, or if PPG would enter into bankruptcy, receivership or reorganization proceedings, its outstanding derivative instruments would also be subject to accelerated settlement.

In 2023 and 2022, there were no derivative instruments de-designated or discontinued as a hedging instrument. There were no gains or losses deferred in Accumulated other comprehensive loss on the consolidated balance sheet that were reclassified to Income before income taxes in the consolidated statement of income during the three-year period ended December 31, 2023 related to hedges of anticipated transactions that were no longer expected to occur.

Fair Value Hedges

The Company uses interest rate swaps from time to time to manage its exposure to changing interest rates. When outstanding, the interest rate swaps are typically designated as fair value hedges of certain outstanding debt obligations of the Company and are recorded at fair value.

PPG has interest rate swaps which converted $375 million and $525 million of fixed rate debt to variable rate debt as of December 31, 2023 and December 31, 2022, respectively. The swaps are designated as fair value hedges and are carried at fair value. Changes in the fair value of these swaps and changes in the fair value of the related debt are recorded in Interest expense in the accompanying consolidated statement of income. The fair value of these interest rate swaps were liabilities of $14 million and $20 million at December 31, 2023 and 2022, respectively.

Cash Flow Hedges

At times, PPG designates certain foreign currency forward contracts as cash flow hedges of the Company's exposure to variability in exchange rates on third party transactions denominated in foreign currencies. There were no outstanding cash flow hedges at December 31, 2023 and December 31, 2022, respectively.

Net Investment Hedges

PPG uses cross currency swaps and foreign currency euro-denominated debt to hedge a significant portion of its net investment in its European operations, as follows:

PPG had U.S. dollar to euro cross currency swap contracts with total notional amounts of $475 million and $775 million as of December 31, 2023 and December 31, 2022, respectively, and designated these contracts as hedges of the Company's net investment in its European operations. During the term of these contracts, PPG will receive payment in U.S. dollars and make payments in euros to the counterparties. As of December 31, 2023 and 2022, the fair value of these contracts were net assets of $33 million and $88 million, respectively.

At December 31, 2023 and 2022, PPG had designated €3.0 billion and €2.5 billion, respectively, of euro-denominated borrowings as hedges of a portion of its net investment in the Company's European operations. The carrying value of these instruments at December 31, 2023 and 2022 was $3.3 billion and $2.6 billion, respectively.

There were no foreign currency forward contracts designated as net investment hedges used or outstanding as of and for the periods ended December 31, 2023, 2022 and 2021.

Other Financial Instruments

PPG uses foreign currency forward contracts to manage net transaction exposures that do not qualify for hedge accounting; therefore, the change in the fair value of these instruments is recorded in Other charges/(income), net in the consolidated statement of income in the period of change. Underlying notional amounts related to these foreign currency forward contracts were $2.5 billion and $1.8 billion at December 31, 2023 and 2022, respectively. The fair values of these contracts were net assets of $23 million and $24 million as of December 31, 2023 and 2022, respectively.

Gains/Losses Deferred in Accumulated Other Comprehensive Loss

As of December 31, 2023 and 2022, the Company had accumulated pretax unrealized translation gains in Accumulated other comprehensive loss on the consolidated balance sheet related to the euro-denominated borrowings, foreign currency forward contracts, and the cross currency swaps of $223 million and $327 million, respectively.

The following table summarizes the amount of gains/(losses) deferred in Other comprehensive (loss)/income ("OCI") and the amount and location of gains recognized within the consolidated statement of income related to derivative and debt financial instruments for the years ended December 31, 2023, 2022 and 2021. All dollar amounts are shown on a pretax basis.

	2023		2022		2021		
($ in millions)	***(Loss)/Gain Deferred in OCI***	***(Loss)/Gain Recognized***	***Gain Deferred in OCI***	***Gain Recognized***	***Gain Deferred in OCI***	***Gain Recognized***	***Caption in Consolidated Statement of Income***
Fair Value							
Interest rate swaps		($10)		$8		$15	Interest expense
Total Fair Value		($10)		$8		$15	
Net Investment							
Cross currency swaps	($15)	$12	$38	$16	$53	$13	Interest expense
Foreign denominated debt	(89)	—	85	—	173	—	
Total Net Investment	($104)	$12	$123	$16	$226	$13	
Economic							
Foreign currency forward contracts		$49		$43		$23	Other charges/(income), net

Fair Value Measurements

The Company follows a fair value measurement hierarchy to measure its assets and liabilities. As of December 31, 2023 and 2022, respectively, the assets and liabilities measured at fair value on a recurring basis were cash equivalents, equity securities and derivatives. In addition, the Company measures its pension plan assets at fair value (see Note 14, “Employee Benefit Plans” for further details). The Company’s financial assets and liabilities are measured using inputs from the following three levels:

Level 1 inputs are quoted prices in active markets for identical assets and liabilities that the Company has the ability to access at the measurement date. Level 1 inputs are considered to be the most reliable evidence of fair value as they are based on unadjusted quoted market prices from various financial information service providers and securities exchanges.

Level 2 inputs are directly or indirectly observable prices that are not quoted on active exchanges, which include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability and inputs that are derived principally from or corroborated by observable market data by correlation or other means. The fair values of the derivative instruments reflect the instruments’ contractual terms, including the period to maturity, and uses observable market-based inputs, including forward curves.

Level 3 inputs are unobservable inputs employed for measuring the fair value of assets or liabilities. The Company does not have any recurring financial assets or liabilities that are recorded in its consolidated balance sheets as of December 31, 2023 and 2022 that are classified as Level 3 inputs.

Assets and liabilities reported at fair value on a recurring basis

	December 31, 2023			December 31, 2022		
($ in millions)	**Level 1**	**Level 2**	**Level 3**	**Level 1**	**Level 2**	**Level 3**
Assets:						
Other current assets:						
Marketable equity securities	$9	$—	$—	$9	$—	$—
Foreign currency forward contracts[a]	—	28	—	—	27	—
Cross currency swaps[b]	—	2	—	—	39	—
Investments:						
Marketable equity securities	$74	$—	$—	$61	$—	$—
Other assets:						
Cross currency swaps[b]	$—	$31	$—	$—	$49	$—
Liabilities:						
Accounts payable and accrued liabilities:						
Foreign currency forward contracts[a]	$—	$5	$—	$—	$3	$—
Interest rate swaps[c]	—	—	—	—	1	—
Other liabilities:						
Interest rate swaps[c]	$—	$14	$—	$—	$19	$—

(a) Derivatives not designated as hedging instruments

(b) Net investment hedges

(c) Fair value hedges

Long-Term Debt

($ in millions)	December 31, 2023 [a]	December 31, 2022 [b]
Long-term debt - carrying value	$6,042	$6,796
Long-term debt - fair value	$5,781	$6,375

(a) Excluding finance lease obligations of $8 million and short term borrowings of $4 million as of December 31, 2023.

(b) Excluding finance lease obligations of $10 million and short term borrowings of $10 million as of December 31, 2022.

The fair values of the debt instruments were measured using Level 2 inputs, including discounted cash flows and interest rates then currently available to the Company for instruments of the same remaining maturities.

12. Earnings Per Common Share

($ in millions, except per share amounts)	2023	2022	2021
Earnings per common share (attributable to PPG)			
Income from continuing operations, net of tax	$1,270	$1,028	$1,420
(Loss)/income from discontinued operations, net of tax	—	(2)	19
Net income (attributable to PPG)	$1,270	$1,026	$1,439
Weighted average common shares outstanding	236.0	236.1	237.6
Effect of dilutive securities:			
Stock options	0.5	0.5	1.0
Other stock compensation plans	0.7	0.7	0.8
Potentially dilutive common shares	1.2	1.2	1.8
Adjusted weighted average common shares outstanding	237.2	237.3	239.4
Earnings per common share (attributable to PPG)			
Income from continuing operations, net of tax	$5.38	$4.35	$5.98
(Loss)/income from discontinued operations, net of tax	—	(0.01)	0.08
Net income (attributable to PPG)	$5.38	$4.34	$6.06
Earnings per common share - assuming dilution (attributable to PPG)			
Income from continuing operations, net of tax	$5.35	$4.33	$5.93
(Loss)/income from discontinued operations, net of tax	—	(0.01)	0.08
Net income (attributable to PPG)	$5.35	$4.32	$6.01
Antidilutive securities[a]:			
Stock options	0.9	0.9	—

(a) Excluded from the computation of earnings per diluted share due to their antidilutive effect.

13. Income Taxes

The provision for income taxes by taxing jurisdiction and by significant components consisted of the following:

($ in millions)	***2023***	***2022***	***2021***
Current			
U.S. federal	$102	$137	$25
U.S. state and local	16	20	13
Foreign	504	325	301
Total current income tax expense	$622	$482	$339
Deferred			
U.S. federal	($153)	($79)	$12
U.S. state and local	(14)	(7)	3
Foreign	(16)	(71)	20
Total deferred income tax (benefit)/expense	($183)	($157)	$35
Total income tax expense	$439	$325	$374

A reconciliation of the statutory U.S. corporate federal income tax rate to the Company's effective tax rate follows:

	2023	***2022***	***2021***
U.S. federal income tax rate	21.0 %	21.0 %	21.0 %
Changes in rate due to:			
Taxes on non-U.S. earnings	4.2	3.6	2.7
Change in valuation allowance reserves	3.4	0.6	—
Other foreign tax effects	(2.7)	(1.6)	(0.4)
Impairment and other related charges, net	1.9	1.4	—
Uncertain tax positions	(1.7)	(0.4)	(1.4)
U.S. tax benefit on foreign operations	(0.9)	(0.4)	(1.6)
U.S. tax incentives	(0.8)	(1.0)	(0.6)
Tax benefits from equity awards	(0.2)	(0.3)	(0.3)
U.S. state and local taxes	—	0.7	0.8
Other	0.9	(0.1)	0.4
Effective income tax rate	**25.1 %**	**23.5 %**	**20.6 %**

(Loss)/income before income taxes of the Company's U.S. operations for 2023, 2022 and 2021 was $(75) million, $288 million and $469 million, respectively. Income before income taxes of the Company's foreign operations for 2023, 2022 and 2021 was $1,823 million, $1,093 million and $1,346 million, respectively.

Deferred income taxes

Deferred income taxes are provided for the effect of temporary differences that arise because there are certain items treated differently for financial accounting than for income tax reporting purposes. The deferred tax assets and liabilities are determined by applying the enacted tax rate in the year in which the temporary difference is expected to reverse.

($ in millions)	***2023***	***2022***
Deferred income tax assets related to		
Employee benefits	$273	$275
Contingent and accrued liabilities	61	67
Operating loss and other carry-forwards	279	218
Operating lease liabilities	203	203
Research and development amortization	214	149
Other	201	168
Valuation allowance	(249)	(182)
Total	$982	$898
Deferred income tax liabilities related to		
Property	$223	$223
Intangibles	696	720
Employee benefits	47	81
Operating lease right-of-use assets	207	206
Other	44	74
Total	$1,217	$1,304
Deferred income tax liabilities – net	($235)	($406)

Net operating loss and credit carryforwards

($ in millions)	***2023***	***2022***	***Expiration***
Available net operating loss carryforwards, tax effected:			
Indefinite expiration	$86	$84	NA
Definite expiration	72	66	2024-2043
Total	$158	$150	
Income tax credit carryforwards	$108	$89	2024-2043

A valuation allowance of $249 million and $182 million has been established as of December 31, 2023 and 2022, respectively, for carryforwards and certain other items when the ability to utilize them is not likely.

Undistributed foreign earnings

The Company had $5.8 billion of undistributed earnings of non-U.S. subsidiaries as of December 31, 2023. This amount relates to approximately 265 subsidiaries in approximately 70 taxable jurisdictions. The Company estimates repatriation of undistributed earnings of non-U.S. subsidiaries as of December 31, 2023 would result in a tax cost of $123 million.

As of December 31, 2023, the Company had not changed its intention to reinvest foreign earnings indefinitely or repatriate when it is tax effective to do so, and as such, has not established a liability for foreign withholding taxes or other costs that would be incurred if the earnings were repatriated.

Unrecognized tax benefits

The Company files federal, state and local income tax returns in numerous domestic and foreign jurisdictions. In most tax jurisdictions, returns are subject to examination by the relevant tax authorities for a number of years after the returns have been filed. The Company is no longer subject to examinations by tax authorities in any major tax jurisdiction for years before 2008. Additionally, the Company is no longer subject to examination by the Internal Revenue Service for U.S. federal income tax returns filed for years through 2018. The examinations of the Company's U.S. federal income tax returns for 2019 and 2020 are currently underway.

A reconciliation of the total amounts of unrecognized tax benefits (excluding interest and penalties) as of December 31 follows:

($ in millions)	***2023***	***2022***	***2021***
January 1	$145	$158	$175
Current year tax positions - additions	16	19	12
Prior year tax positions - additions	33	2	10
Prior year tax positions - reductions	(14)	(2)	(2)
Statute of limitations expirations	(9)	(23)	(19)
Settlements	(51)	(3)	(21)
Foreign currency translation	1	(6)	3
December 31	$121	$145	$158

The Company expects that any reasonably possible change in the amount of unrecognized tax benefits in the next 12 months would not be significant. The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate was $117 million as of December 31, 2023.

Interest and penalties

($ in millions)	***2023***	***2022***	***2021***
Accrued interest and penalties related to unrecognized tax benefits	$14	$17	$17
(Income)/loss recognized in income tax expense related to interest and penalties	($2)	$1	($2)

The Company recognizes accrued interest and penalties related to unrecognized tax benefits in income tax expense.

14. Employee Benefit Plans

Defined Benefit Plans

PPG has defined benefit pension plans that cover certain employees worldwide. The principal defined benefit pension plans are those in the U.S., Canada, Germany, the Netherlands and the U.K. These plans in the aggregate represent approximately 93% of PPG's total projected benefit obligation at December 31, 2023, of which the U.S. defined benefit pension plans represent the largest component.

As of January 1, 2006, the Company's U.S. salaried defined benefit plans were closed to new entrants. In 2011 and 2012, the Company approved amendments related to its U.S. and Canadian defined benefit plans pursuant to which employees

stopped accruing benefits at certain dates based on the affected employee's combined age and years of service to PPG. As of December 31, 2020, the Company's U.S. and Canadian defined benefit plans were frozen for all participants. The Company plans to continue reviewing and potentially amending PPG defined benefit plans in the future.

U.S. pension annuity contracts

In March 2023, the Company purchased group annuity contracts that transferred to third-party insurance companies pension benefit obligations for certain of the Company's retirees in the U.S. who were receiving their monthly retirement benefit payments from a U.S. pension plan. The amount of each affected retiree's annuity payment is equal to the amount of such individual's pension benefit. The purchase of group annuity contracts was funded directly by the assets of the U.S. plans. By transferring the obligations and assets to the insurance companies, the Company reduced its overall pension projected benefit obligation by $309 million and recognized a non-cash Pension settlement charge of $190 million in the consolidated statement of income for the year ended December 31, 2023.

Canadian pension annuity contracts

In December 2021, the Company purchased group annuity contracts that transferred pension benefit obligations for certain of the Company's retirees in Canada who were receiving their monthly retirement benefit payments from PPG's Canadian pension plans to a third-party insurance company. The amount of each affected retiree's annuity payment is equal to the amount of such individual's pension benefit. The purchase of group annuity contracts was funded directly by the assets of the Canadian plans. By transferring the obligations and assets to the insurance company, the Company reduced its overall pension projected benefit obligation by approximately $175 million and recognized a non-cash pension settlement charge of $50 million in the consolidated statement of income for the year ended December 31, 2021.

Postretirement medical

PPG sponsors welfare benefit plans that provide postretirement medical and life insurance benefits for certain U.S. and Canadian employees and their dependents of which the U.S. welfare benefit plans represent approximately 86% of PPG's total projected benefit obligation at December 31, 2023. Salaried and certain hourly employees in the U.S. hired on or after October 1, 2004, or rehired on or after October 1, 2012 are not eligible for postretirement medical benefits. These plans in the U.S. and Canada require retiree contributions based on retiree-selected coverage levels for certain retirees and their dependents and provide for sharing of future benefit cost increases between PPG and participants based on management discretion. The Company has the right to modify, amend or terminate certain of these benefit plans in the future.

Effective January 1, 2017, the Company-sponsored Medicare-eligible plans were replaced by a Medicare private exchange. The announcement of this plan design change triggered a remeasurement of PPG's retiree medical benefit obligation using prevailing interest rates. The plan design change resulted in a $306 million reduction in the Company's postretirement benefit obligation. PPG accounted for the plan design change prospectively, and the impact was amortized to periodic postretirement benefit cost over a 5.6 year period through mid-2022.

The following table sets forth the changes in projected benefit obligations ("PBO"), plan assets, the funded status and the amounts recognized on the accompanying consolidated balance sheet for the Company's defined benefit pension and other postretirement benefit plans:

	Defined Benefit Pension Plans					
	United States		International		Total PPG	
($ in millions)	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**
Projected benefit obligation, January 1	$1,425	$1,920	$961	$1,614	$2,386	$3,534
Service cost	—	—	7	9	7	9
Interest cost	62	45	49	28	111	73
Actuarial losses/(gains)	44	(449)	75	(485)	119	(934)
Benefits paid	(79)	(91)	(50)	(49)	(129)	(140)
Foreign currency translation adjustments	—	—	47	(126)	47	(126)
Settlements	(309)	—	(11)	(22)	(320)	(22)
Other	—	—	(5)	(8)	(5)	(8)
Projected benefit obligation, December 31	$1,143	$1,425	$1,073	$961	$2,216	$2,386
Market value of plan assets, January 1	$1,028	$1,329	$946	$1,646	$1,974	$2,975
Actual return on plan assets	45	(228)	43	(506)	88	(734)
Company contributions	28	—	18	11	46	11
Benefits paid	(61)	(73)	(40)	(41)	(101)	(114)
Plan settlements	(309)	—	(11)	(22)	(320)	(22)
Foreign currency translation adjustments	—	—	45	(140)	45	(140)
Other	—	—	(3)	(2)	(3)	(2)
Market value of plan assets, December 31	$731	$1,028	$998	$946	$1,729	$1,974
Funded Status	($412)	($397)	($75)	($15)	($487)	($412)
Amounts recognized in the Consolidated Balance Sheet:						
Other assets (long-term)	—	—	152	183	152	183
Accounts payable and accrued liabilities	(38)	(17)	(13)	(12)	(51)	(29)
Accrued pensions	(374)	(380)	(214)	(186)	(588)	(566)
Net liability recognized	($412)	($397)	($75)	($15)	($487)	($412)

	Other Postretirement Benefit Plans					
	United States		International		Total PPG	
($ in millions)	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**
Projected benefit obligation, January 1	$458	$631	$66	$93	$524	$724
Service cost	4	8	—	—	4	8
Interest cost	23	13	4	3	27	16
Plan amendments	(17)	—	—	—	(17)	—
Actuarial (gains)/losses	(3)	(154)	3	(20)	—	(174)
Benefits paid	(39)	(40)	(3)	(4)	(42)	(44)
Foreign currency translation adjustments	—	—	1	(6)	1	(6)
Curtailments	(2)	—	—	—	(2)	—
Projected benefit obligation, December 31	$424	$458	$71	$66	$495	$524
Amounts recognized in the Consolidated Balance Sheet:						
Accounts payable and accrued liabilities	(41)	(44)	(4)	(4)	(45)	(48)
Other postretirement benefits	(383)	(414)	(67)	(62)	(450)	(476)
Net liability recognized	($424)	($458)	($71)	($66)	($495)	($524)

The PBO is the actuarial present value of benefits attributable to employee service rendered to date, including the effects of estimated future pay increases. The accumulated benefit obligation ("ABO") is the actuarial present value of benefits attributable to employee service rendered to date, but does not include the effects of estimated future pay increases. The ABO for all defined benefit pension plans as of December 31, 2023 and 2022 was $2.2 billion and $2.3 billion, respectively.

The following table details the pension plans where the benefit liability exceeds the fair value of the plan assets:

	Pensions	
($ in millions)	**2023**	**2022**
Plans with PBO in Excess of Plan Assets:		
Projected benefit obligation	$1,426	$1,863
Fair value of plan assets	$771	$1,270
Plans with ABO in Excess of Plan Assets:		
Accumulated benefit obligation	$1,366	$1,833
Fair value of plan assets	$737	$1,266

Net actuarial losses/(gains) and prior service credit deferred in accumulated other comprehensive loss

	Pensions		Other Postretirement Benefits	
($ in millions)	**2023**	**2022**	**2023**	**2022**
Accumulated net actuarial losses/(gains)	$682	$748	($15)	($16)
Accumulated prior service credit	—	—	(20)	(10)
Total	$682	$748	($35)	($26)

The accumulated net actuarial losses (gains) for pensions and other postretirement benefits relate primarily to historical changes in the discount rates. The accumulated net actuarial losses exceeded 10% of the higher of the market value of plan assets or the PBO at the beginning of each of the last three years; therefore, amortization of such excess has been included in net periodic benefit costs for pension and other postretirement benefits in these periods. The amortization period is the average remaining service period of active employees expected to receive benefits unless a plan is mostly inactive in which case the amortization period is the average remaining life expectancy of the plan participants. Accumulated prior service credit is amortized over the future service periods of those employees who are active at the dates of the plan amendments and who are expected to receive benefits.

The net decrease in Accumulated other comprehensive loss (pretax) related to defined benefit pension and other postretirement benefit plans during the year ended December 31, 2023 was due to the following:

($ in millions)	Pensions	Other Postretirement Benefits
Net actuarial loss arising during the year	$141	$—
Plan amendment	—	(17)
Amortization of actuarial loss/(gain)	(21)	1
Amortization of prior service credit	—	7
Foreign currency translation adjustments	8	—
Impact of settlements	(194)	—
Net decrease	($66)	($9)

The 2023 net actuarial loss related to the Company's pension and other postretirement benefit plans was primarily due to a decrease in the weighted average discount rate used to determine the benefit obligation at December 31, 2023. The Company also recognized a net actuarial gain of $17 million in 2023 due to a plan amendment to its U.S. other postretirement benefits plan, whereby effective January 1, 2024, PPG eliminated retiree life insurance benefits for certain salaried active participants who are not eligible for retiree medical benefits.

Net periodic benefit cost/(income)

	Pensions			Other Postretirement Benefits		
($ in millions)	***2023***	***2022***	***2021***	***2023***	***2022***	***2021***
Service cost	$7	$9	$9	$4	$8	$12
Interest cost	111	73	65	27	16	14
Expected return on plan assets	(110)	(140)	(152)	—	—	—
Amortization of prior service credit	—	—	—	(7)	(11)	(54)
Amortization of actuarial losses/(gains)	21	34	39	(1)	12	20
Settlements, curtailments, and special termination benefits	192	6	53	(2)	—	—
Net periodic benefit cost/(income)	$221	($18)	$14	$21	$25	($8)

Service cost for net periodic pension and other postretirement benefit costs is included in Cost of sales, exclusive of depreciation and amortization, Selling, general and administrative, and Research and development, net in the accompanying consolidated statement of income. Except for the U.S. pension settlement charge in 2023 and the Canadian pension settlement charge in 2021, which are both recorded in Pension settlement charge, all other non-service cost components of net periodic benefit cost are recorded in Other charges/(income), net in the accompanying consolidated statement of income.

Key assumptions

The following weighted average assumptions were used to determine the benefit obligation for the Company's defined benefit pension and other postretirement plans as of December 31, 2023 and 2022:

	United States		International		Total PPG	
	2023	2022	2023	2022	2023	2022
Discount rate	5.2 %	5.4 %	4.5 %	4.9 %	4.9 %	5.2 %
Rate of compensation increase	2.5 %	2.5 %	3.2 %	3.1 %	2.8 %	2.7 %

The following weighted average assumptions were used to determine the net periodic benefit cost for the Company's defined benefit pension and other postretirement benefit plans for the three years in the period ended December 31, 2023:

	2023	2022	2021
Discount rate	5.2 %	2.5 %	2.1 %
Expected return on assets	6.5 %	5.0 %	4.8 %
Rate of compensation increase	2.7 %	2.6 %	1.5 %

These assumptions for each plan are reviewed on an annual basis. In determining the expected return on plan asset assumption, the Company evaluates the mix of investments that comprise each plan's assets and external forecasts of future long-term investment returns. The Company compares the expected return on plan assets assumption to actual historic returns to ensure reasonability. For 2023, the return on plan assets assumption for PPG's U.S. defined benefit pension plans was 7.4%. A change in the rate of return of 75 basis points, with other assumptions held constant, would impact 2024 net periodic pension expense by $5 million. The global expected return on plan assets assumption to be used in determining 2024 net periodic pension expense will be 6.6% (7.7% for the U.S. plans only).

The discount rates used in accounting for pension and other postretirement benefits are determined using a yield curve constructed of high-quality fixed-income securities as of the measurement date and using the plans' projected benefit payments. The Company has elected to use a full yield curve approach in the estimation of the service and interest cost components of net periodic pension benefit cost/(income) for countries with significant pension plans. The full yield curve approach (also known as the split-rate or spot-rate method) allows the Company to align the applicable discount rates with the cost of additional service being earned and the interest being accrued on these obligations. A change in the discount rate of 75 basis points, with all other assumptions held constant, would impact 2024 net periodic benefit expense for our defined benefit pension and other postretirement benefit plans by $3 million and $2 million, respectively.

The weighted-average health care cost trend rate (inflation) used for 2023 was 5.8% declining to a projected 3.9% in the year 2047. For 2024, the assumed weighted-average health care cost trend rate used will be 5.5% declining to a projected 3.9% between 2024 and 2048 for medical and prescription drug costs, respectively. These assumptions are reviewed on an annual basis. In selecting rates for current and long-term health care cost assumptions, the Company takes into consideration a number of factors, including the Company's actual health care cost increases, the design of the Company's benefit programs, the demographics of the Company's active and retiree populations and external expectations of future medical cost inflation rates.

Contributions to defined benefit pension plans

($ in millions)	2023	2022	2021
U.S. defined benefit pension plans	$28	$—	$—
Non-U.S. defined benefit pension plans	$18	$11	$10

PPG made voluntary contributions to its U.S. defined benefit pension plans of $28 million during 2023. Contributions made to PPG's non-U.S. defined benefit pension plans in 2023, 2022, and 2021 were required by local funding requirements. In addition to any mandatory contributions, PPG may elect to make voluntary contributions to its defined benefit pension plans in 2024 and beyond.

Benefit payments

The estimated benefits expected to be paid under the Company's defined benefit pension and other postretirement benefit plans are:

($ in millions)	Pensions	Other Postretirement Benefits
2024	$152	$45
2025	$137	$44
2026	$140	$41
2027	$145	$40
2028	$146	$40
2029 to 2033	$775	$177

Plan assets

Each PPG sponsored defined benefit pension plan is managed in accordance with the requirements of local laws and regulations governing defined benefit pension plans for the exclusive purpose of providing pension benefits to participants and their beneficiaries. Investment committees comprised of PPG managers have fiduciary responsibility to oversee the management of pension plan assets by third party asset managers. Pension plan assets are held in trust by financial institutions and managed on a day-to-day basis by the asset managers. The asset managers receive a mandate from each investment committee that is aligned with the asset allocation targets established by each investment committee to achieve the plan's investment strategies. The performance of the asset managers is monitored and evaluated by the investment committees throughout the year.

Pension plan assets are invested to generate investment earnings over an extended time horizon to help fund the cost of benefits promised under the plans while mitigating investment risk. The asset allocation targets established for each pension plan are intended to diversify the investments among a variety of asset categories and among a variety of individual securities within each asset category to mitigate investment risk and provide each plan with sufficient liquidity to fund the payment of pension benefits to retirees.

The following summarizes the weighted average target pension plan asset allocation as of December 31, 2023 and 2022 for all PPG defined benefit plans:

Asset Category	2023	**2022**
Equity securities	15-45%	15-45%
Debt securities	30-65%	30-65%
Real estate	0-10%	0-10%
Other	20-40%	20-40%

The fair values of the Company's pension plan assets at December 31, 2023 and 2022, by asset category, are as follows:

	December 31, 2023				December 31, 2022			
($ in millions)	*Level 1[1]*	*Level 2[1]*	*Level 3[1]*	*Total*	*Level 1[1]*	*Level 2[1]*	*Level 3[1]*	*Total*
Asset Category								
Equity securities:								
U.S.								
Large cap	$65	$55	$—	$120	$66	$43	$—	$109
Small cap	16	—	—	16	25	—	—	25
Non-U.S.								
Developed and emerging markets[2]	96	43	—	139	99	43	—	142
Debt securities:								
Cash and cash equivalents	22	41	—	63	7	47	—	54
Corporate[3]								
U.S.[4]	—	1	—	1	—	168	80	248
Developed and emerging markets[2]	—	—	—	—	—	1	—	1
Diversified[5]	—	—	—	—	—	13	—	13
Government								
U.S.[4]	—	—	—	—	49	10	—	59
Developed and emerging markets[2]	—	1	—	1	—	6	—	6
Other[6]	—	—	258	258	—	—	235	235
Real estate, hedge funds, and other	—	306	341	647	—	275	362	637
Total assets in the fair value hierarchy	$199	$447	$599	$1,245	$246	$606	$677	$1,529
Common-collective trusts[7]	—	—	—	484	—	—	—	445
Total Investments	$199	$447	$599	$1,729	$246	$606	$677	$1,974

(1) These levels refer to the accounting guidance on fair value measurement described in Note 11, "Financial Instruments, Hedging Activities and Fair Value Measurements."

(2) This category represents holdings in investment grade debt or equity securities of issuers in both developed markets and emerging economies.

(3) This category represents investment grade debt securities from a diverse set of industry issuers.

(4) This category primarily represents long duration fixed income securities.

(5) This category represents commingled funds invested in diverse portfolios of debt securities.

(6) This category primarily represents insurance contracts.

(7) Certain investments that are measured at net asset value per share (or its equivalent) are not required to be classified in the fair value hierarchy.

The change in the fair value of the Company's Level 3 pension assets for the years ended December 31, 2023 and 2022 was as follows:

($ in millions)	*Real Estate*	*Other Debt Securities*	*Hedge Funds and Other Assets*	*Total*
January 1, 2022	$157	$367	$430	$954
Realized gains/(losses)	1	(99)	(1)	(99)
Unrealized gains	6	—	(3)	3
Transfers in/(out), net	(10)	(12)	(100)	(122)
Foreign currency losses	(5)	(21)	(33)	(59)
December 31, 2022	$149	$235	$293	$677
Realized gains/(losses)	4	25	(29)	—
Unrealized gains/(losses)	(19)	—	21	2
Transfers out, net	(17)	(9)	(89)	(115)
Foreign currency losses	2	7	26	35
December 31, 2023	$119	$258	$222	$599

Real estate properties are externally appraised at least annually by reputable, independent appraisal firms. Property valuations are also reviewed on a regular basis and are adjusted if there has been a significant change in circumstances related to the property since the last valuation.

Other debt securities primarily consist of insurance contracts, which are valued externally by insurance companies based on the present value of the expected future cash flows.

Hedge funds consist of a wide range of investments which target a relatively stable investment return. The underlying funds are valued at different frequencies, some monthly and some quarterly, based on the value of the underlying investments. Other assets consist primarily of small investments in private equity funds and debt obligations of non-investment grade borrowers.

Other Plans

Employee savings plans

PPG's Employee Savings Plans ("Savings Plans") cover substantially all employees in the U.S., Puerto Rico and Canada. The Company makes matching contributions to the Savings Plans, at management's discretion, based upon participants' savings, subject to certain limitations. For most participants, Company-matching contributions are established each year at the discretion of the Company and are applied to participant accounts up to a maximum of 6% of eligible participant compensation. The Company-matching contribution remained at 100% for 2023.

Compensation expense and cash contributions related to the Company match of participant contributions to the Savings Plans for 2023, 2022, and 2021 totaled $61 million, $56 million and $52 million, respectively. A portion of the Savings Plans qualifies under the Internal Revenue Code as an Employee Stock Ownership Plan. Accordingly, dividends received on PPG shares held in that portion of the Savings Plans totaling $11 million, $11 million, and $10 million for 2023, 2022, and 2021, respectively, are deductible for PPG's U.S. Federal tax purposes.

Defined contribution plans

Additionally, the Company has defined contribution plans for certain employees in the U.S., China, United Kingdom, Australia, Italy and other countries. The U.S. defined contribution plan is part of the Employee Savings Plan, and eligible employees receive a contribution equal to between 2% and 5% of annual compensation, based on age and years of service. For the years ended December 31, 2023, 2022 and 2021, the Company recognized expense for its defined contribution retirement plans of $90 million, $92 million and $88 million, respectively. The Company's annual cash contributions to its defined contribution retirement plans approximated the expense recognized in each year.

Deferred compensation plan

The Company has a deferred compensation plan for certain key managers which allows them to defer a portion of their compensation in a phantom PPG stock account or other phantom investment accounts. The amount deferred earns a return based on the investment options selected by the participant. The amount owed to participants is an unfunded and unsecured general obligation of the Company. Upon retirement, death, disability, termination of employment, scheduled payment or unforeseen emergency, the compensation deferred and related accumulated earnings are distributed in accordance with the participant's election in cash or in PPG stock, based on the accounts selected by the participant.

The plan provides participants with investment alternatives and the ability to transfer amounts between the phantom non-PPG stock investment accounts. To mitigate the impact on compensation expense of changes in the market value of the liability, the Company has purchased a portfolio of marketable securities that mirror the phantom non-PPG stock investment accounts selected by the participants, except the money market accounts. These investments are carried by PPG at fair market value, and the changes in market value of these securities are also included in Income before income taxes in the consolidated statement of income. Trading occurs in this portfolio to align the securities held with the participant's phantom non-PPG stock investment accounts, except the money market accounts.

The cost of the deferred compensation plan, comprised of dividend equivalents accrued on the phantom PPG stock account, investment income and the change in market value of the liability, was $23 million, $23 million and $20 million in 2023, 2022 and 2021, respectively. These amounts are included in Selling, general and administrative in the consolidated statements of income. The change in market value of the investment portfolio was income of $21 million, $24 million, and $18 million in 2023, 2022 and 2021, respectively, and is also included in Selling, general and administrative in the consolidated statements of income.

The Company's obligations under this plan, which are included in Accounts payable and accrued liabilities and Other liabilities on the consolidated balance sheet, totaled $113 million and $105 million as of December 31, 2023 and 2022, respectively, and the investments in marketable securities, which are included in Investments and Other current assets on the accompanying consolidated balance sheet, were $83 million and $70 million as of December 31, 2023 and 2022, respectively.

15. Commitments and Contingent Liabilities

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. These lawsuits and claims may relate to contract, patent, environmental, product liability, antitrust, employment and other matters arising out of the conduct of PPG's current and past business activities. To the extent that these lawsuits and claims involve personal injury, property damage and certain other claims, PPG believes it has adequate insurance; however, certain of PPG's insurers are contesting coverage with

respect to some of these claims, and other insurers may contest coverage with respect to some claims in the future. PPG's lawsuits and claims against others include claims against insurers and other third parties with respect to actual and contingent losses related to environmental, asbestos and other matters.

The results of any current or future litigation and claims are inherently unpredictable. However, management believes that, in the aggregate, the outcome of all lawsuits and claims involving PPG will not have a material effect on PPG's consolidated financial position or liquidity; however, such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized.

Asbestos Matters

As of December 31, 2023, the Company was aware of certain asbestos-related claims pending against the Company and certain of its subsidiaries. The Company is defending these asbestos-related claims vigorously. The asbestos-related claims consist of claims against the Company alleging:

- exposure to asbestos or asbestos-containing products manufactured, sold or distributed by the Company or its subsidiaries ("Products Claims");
- personal injury caused by asbestos on premises presently or formerly owned, leased or occupied by the Company ("Premises Claims"); and
- asbestos-related claims against a subsidiary the Company acquired in 2013 ("Subsidiary Claims").

The Company monitors and reviews the activity associated with its asbestos claims and evaluates, on a periodic basis, its estimated liability for such claims and all underlying assumptions to determine whether any adjustment to the reserves for these claims is required. Additionally, as a supplement to its periodic monitoring and review, the Company conducts discussions with counsel and engages valuation consultants to analyze its claims history and estimate the amount of the Company's potential liability for asbestos-related claims.

In 2023 and 2022, no adjustments to the Company's estimate of its asbestos-related liabilities were required.

In 2021, based on the results of the Company's valuation analysis, the Company reduced its estimate of potential liability for Products Claims by $146 million. The 2021 valuation analysis with respect to Products Claims was based, in part, upon a review of claims data following the expiration in May 2016 of the U.S. Bankruptcy Court's injunction staying most asbestos claims against the Company that had been in effect since April 2000; annual filings by disease and year; pending, paid and dismissed claims; indemnity cash flows; and estimates of future claim, indemnity and acceptance rates. The Company also adjusted its estimates of potential liability for Premises Claims and Subsidiary Claims in the fourth quarter of 2021.

As a result of the Company's 2021 review of its asbestos-related liabilities, income of $133 million was recorded in the consolidated statement of income to reduce the reserve to reflect the Company's current estimate of potential liability for asbestos-related bodily injury claims through December 31, 2057.

As of December 31, 2023 and 2022, the Company's asbestos-related reserves totaled $48 million and $51 million, respectively.

The Company believes that, based on presently available information, the total reserves of $48 million for asbestos-related claims will be sufficient to encompass all of the Company's current and estimable potential future asbestos liabilities. These reserves, which are included within Other liabilities on the accompanying consolidated balance sheets, involve significant management judgment and represent the Company's current best estimate of its liability for these claims.

The amount reserved for asbestos-related claims by its nature is subject to many uncertainties that may change over time, including (i) the ultimate number of claims filed; (ii) whether closed, dismissed or dormant claims are reinstituted, reinstated or revived; (iii) the amounts required to resolve both currently known and future unknown claims; (iv) the amount of insurance, if any, available to cover such claims; (v) the unpredictable aspects of the tort system, including a changing trial docket and the jurisdictions in which trials are scheduled; (vi) the outcome of any trials, including potential judgments or jury verdicts; (vii) the lack of specific information in many cases concerning exposure for which the Company is allegedly responsible, and the claimants' alleged diseases resulting from such exposure; and (viii) potential changes in applicable federal and/or state tort liability law. All of these factors may have a material effect upon future asbestos-related liability estimates. While the ultimate outcome of the Company's asbestos litigation cannot be predicted with certainty, the Company believes that any financial exposure resulting from its asbestos-related claims will not have a material adverse effect on the Company's consolidated financial position, liquidity or results of operations.

Environmental Matters

In management's opinion, the Company operates in an environmentally sound manner and the outcome of the Company's environmental contingencies will not have a material effect on PPG's financial position or liquidity; however, any such

outcome may be material to the results of operations of any particular period in which costs, if any, are recognized. Management anticipates that the resolution of the Company's environmental contingencies will occur over an extended period of time.

As remediation at certain environmental sites progresses, PPG continues to refine its assumptions underlying the estimates of the expected future costs of its remediation programs. PPG's ongoing evaluation may result in additional charges against income to adjust the reserves for these sites. In 2023, 2022 and 2021, certain charges have been recorded based on updated estimates to increase existing reserves for these sites. Certain other charges related to environmental remediation actions are recorded to expense as incurred.

As of December 31, 2023 and 2022, PPG had reserves for environmental contingencies associated with PPG's former chromium manufacturing plant in Jersey City, New Jersey ("New Jersey Chrome"), glass and chemical manufacturing sites, and for other environmental contingencies, including current manufacturing locations and National Priority List sites. These reserves are reported as Accounts payable and accrued liabilities and Other liabilities in the accompanying consolidated balance sheet.

Environmental Reserves		
($ in millions)	***2023***	***2022***
New Jersey Chrome	$53	$58
Glass and chemical	54	60
Other	120	99
Total environmental reserves	$227	$217
Current Portion	*$52*	*$50*

Pretax charges against income for environmental remediation costs are included in Other charges/(income), net in the accompanying consolidated statement of income. The pretax charges and cash outlays related to such environmental remediation in 2023, 2022 and 2021, were as follows:

($ in millions)	***2023***	***2022***	***2021***
New Jersey Chrome	$7	$—	$25
Glass and chemical	5	3	12
Other	34	10	7
Total pretax environmental charges	$46	$13	$44
Cash outlays for environmental spending	*$36*	*$78*	*$56*

In the fourth quarter 2023, the Company recognized pretax environmental charges of $30 million related to certain legacy PPG manufacturing sites, primarily due to an increase in estimated environmental remediation costs at the Riverside Industrial Park Superfund Site in Newark, New Jersey ("Riverside") and the New Jersey Chrome sites. The Company entered into a consent decree with the United States Department of Justice and the United States Environmental Protection Agency related to the Riverside site during the fourth quarter 2023, which resulted in an increase in estimated environmental remediation costs for soil cleanup and certain other costs.

In the fourth quarter 2021, PPG released an environmental reserve previously established at the time of the sale of the flat glass business under the terms of the separation agreement, resulting in recognition of $25 million of income from discontinued operations, or $19 million net of tax.

The Company continues to analyze, assess and remediate the environmental issues associated with New Jersey Chrome as further discussed below. Excluding the charges related to New Jersey Chrome, pretax charges against income for environmental remediation have ranged between approximately $5 million and $40 million per year for the past 10 years.

Management expects cash outlays for environmental remediation costs to range from $40 million to $60 million in 2024, and $20 million to $75 million annually from 2025 through 2028.

Actual future cash outlays may vary from expected future cash outlays and actual future costs may vary from accrued estimates due to the inherent uncertainties involved in estimating future environmental remediation costs, including possible technological, regulatory and enforcement developments, the results of environmental studies and other factors. Specifically, the level of expected future remediation costs and cash outlays is highly dependent upon activity related to New Jersey Chrome as discussed below.

Remediation: New Jersey Chrome

In June 2009, PPG entered into a settlement agreement with the New Jersey Department of Environmental Protection ("NJDEP") and Jersey City, New Jersey (which had asserted claims against PPG for lost tax revenue) which was in the form of a Partial Consent Judgement (the "Consent"). Under the Consent, PPG accepted sole responsibility for the remediation activities at its former chromium manufacturing location in Jersey City and a number of additional surrounding sites. Remediation of the New Jersey Chrome sites requires PPG to remediate soil and groundwater contaminated by

hexavalent chromium, as well as perform certain other environmental remediation activities. The most significant assumptions underlying the estimate of remediation costs for all New Jersey Chrome sites relate to the extent and concentration of chromium in the soil.

PPG regularly evaluates the assessments of costs incurred to date versus current progress and the potential cost impacts of the most recent information, including the extent of impacted soils and groundwater, engineering, administrative and other associated costs. Based on these assessments, the reserve is adjusted accordingly. As of December 31, 2023 and 2022, PPG's reserve for remediation of all New Jersey Chrome sites was $53 million and $58 million, respectively. The major cost components of this liability are related to excavation of impacted soil, as well as long-term monitoring. These components each account for approximately 65% and 10% of the amount accrued at December 31, 2023, respectively.

There are multiple, future events yet to occur, including further remedy selection and design, remedy implementation and execution and applicable governmental agency or community organization approvals. Considerable uncertainty exists regarding the timing of these future events for the New Jersey Chrome sites. Further resolution of these events is expected to occur over the next several years. As these events occur and to the extent that the cost estimates of the environmental remediation remedies change, the existing reserve for this environmental remediation matter will continue to be adjusted.

Remediation: Glass, Chemicals and Other Sites

Among other sites at which PPG is managing environmental liabilities, remedial actions are occurring at a chemical manufacturing site in Barberton, Ohio where PPG has completed a Facility Investigation and Corrective Measure Study under the United States Environmental Protection Agency's Resource Conservation and Recovery Act Corrective Action Program. PPG has also been addressing the impacts from a legacy plate glass manufacturing site in Kokomo, Indiana under the Voluntary Remediation Program of the Indiana Department of Environmental Management and a site associated with a legacy plate glass manufacturing site near Ford City, Pennsylvania under the Pennsylvania Land Recycling Program under the oversight of the Pennsylvania Department of Environmental Protection. PPG is currently performing additional investigation and remedial activities at these locations.

With respect to certain other waste sites, the financial condition of other potentially responsible parties also contributes to the uncertainty of estimating PPG's final costs. Although contributors of waste to sites involving other potentially responsible parties may face governmental agency assertions of joint and several liability, in general, final allocations of costs are made based on the relative contributions of wastes to such sites. PPG is generally not a major contributor to such sites.

Remediation: Reasonably Possible Matters

In addition to the amounts currently reserved for environmental remediation, the Company may be subject to loss contingencies related to environmental matters estimated to be as much as $100 million to $200 million. Such unreserved losses are reasonably possible but are not currently considered to be probable of occurrence. These reasonably possible unreserved losses relate to environmental matters at a number of sites, none of which are individually significant. The loss contingencies related to these sites include significant unresolved issues such as the nature and extent of contamination at these sites and the methods that may have to be employed to remediate them.

The impact of evolving programs, such as natural resource damage claims, industrial site re-use initiatives and domestic and international remediation programs, also adds to the present uncertainties with regard to the ultimate resolution of this unreserved exposure to future loss. The Company's assessment of the potential impact of these environmental contingencies is subject to considerable uncertainty due to the complex, ongoing and evolving process of investigation and remediation, if necessary, of such environmental contingencies, and the potential for technological and regulatory developments.

16. Shareholders' Equity

A class of 10 million shares of preferred stock, without par value, is authorized but unissued. Common stock has a par value of $1.66 $^{2}/_{3}$ per share; 1.2 billion shares are authorized.

	Common Stock	Treasury Stock	Shares Outstanding
January 1, 2021	581,146,136	(344,459,871)	236,686,265
Purchases	—	(1,521,765)	(1,521,765)
Issuances	—	742,526	742,526
December 31, 2021	581,146,136	(345,239,110)	235,907,026
Purchases	—	(1,269,830)	(1,269,830)
Issuances	—	436,730	436,730
December 31, 2022	581,146,136	(346,072,210)	235,073,926
Purchases	—	(673,638)	(673,638)
Issuances	—	810,566	810,566
December 31, 2023	581,146,136	(345,935,282)	235,210,854

Per share cash dividends paid were $2.54, $2.42 and $2.26 in 2023, 2022 and 2021, respectively.

17. Accumulated Other Comprehensive Loss (AOCL)

($ in millions)	Foreign Currency Translation Adjustments[1]	Pension and Other Postretirement Benefit Adjustments, net of tax[2]	Unrealized Gain on Derivatives, net of tax	Accumulated Other Comprehensive Loss
January 1, 2021	($1,663)	($937)	$1	($2,599)
Current year deferrals to AOCL	(325)	132	—	(193)
Reclassifications from AOCL to net income	—	42	—	42
December 31, 2021	($1,988)	($763)	$1	($2,750)
Current year deferrals to AOCL	(301)	175	—	(126)
Reclassifications from AOCL to net income	35	31	—	66
December 31, 2022	($2,254)	($557)	$1	($2,810)
Current year deferrals to AOCL	475	(93)	—	382
Reclassifications from AOCL to net income	33	156	—	189
December 31, 2023	($1,746)	($494)	$1	($2,239)

(1) The tax cost related to unrealized foreign currency translation adjustments on net investment hedges as of December 31, 2023, 2022 and 2021 was $47 million, $73 million and $55 million, respectively.

(2) The tax cost related to the adjustment for pension and other postretirement benefits as of December 31, 2023, 2022 and 2021 was $20 million, $83 million and $48 million, respectively. Reclassifications from AOCL are included in the computation of net periodic benefit costs (see Note 14, “Employee Benefit Plans").

18. Other Charges/(Income), Net

($ in millions)	2023	2022	2021
Environmental charges[1]	$46	$13	$44
Pension and other postretirement benefit plans, non-service cost components	39	(10)	(15)
Share of net earnings of equity affiliates (See Note 5)	(21)	(25)	(15)
Loss/(gain) on sale of assets, net [2]	23	(4)	(44)
Argentina currency devaluation loss [3]	20	—	—
Royalty income	(10)	(8)	(8)
Business restructuring (income)/charges, net	(2)	33	31
Income from legal settlements	—	—	(22)
Other, net	(12)	(26)	(83)
Total other charges/(income), net	$83	($27)	($112)

(1) In 2023, PPG recognized charges of $30 million related to environmental remediation costs at certain legacy PPG manufacturing sites.

(2) In 2023, PPG recognized a $22 million loss on the divestitures of the European and Australian traffic solutions businesses. In 2021, PPG recognized a $34 million gain on the sale of a production facility in connection with the Company’s manufacturing footprint consolidation plans and associated restructuring programs.

(3) In December 2023, the central bank of Argentina adjusted the official foreign currency exchange rate for the Argentine peso, significantly devaluing the currency relative to the United States dollar. Argentina currency devaluation losses represent foreign currency translation losses recognized during December 2023 related to the devaluation of the Argentine peso.

19. Stock-Based Compensation

The Company’s stock-based compensation includes stock options, restricted stock units (“RSUs”) and grants of contingent shares that are earned based on achieving targeted levels of total shareholder return. All current grants of stock options, RSUs and contingent shares are made under the PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan (“PPG Amended Omnibus Plan”), which was amended and restated effective April 21, 2016.

($ in millions)	2023	2022	2021
Total stock-based compensation	$59	$35	$57
Income tax benefit recognized	$12	$8	$12

Stock Options

PPG has outstanding stock option awards that have been granted under the PPG Amended Omnibus Plan. Under the PPG Amended Omnibus Plan, certain employees of the Company have been granted options to purchase shares of common stock at prices equal to the fair market value of the shares on the date the options were granted. The options are generally exercisable 36 months after being granted and have a maximum term of 10 years. Upon exercise of a stock option, shares of Company stock are issued from treasury stock.

The fair value of stock options issued to employees is measured on the date of grant and is recognized as expense, net of estimated forfeitures, over the requisite service period. PPG estimates the fair value of stock options using the Black-Scholes option pricing model. The risk-free interest rate is determined by using the U.S. Treasury yield curve at the date of the grant and using a maturity equal to the expected life of the option. The expected life of options is calculated using the average of the vesting term and the maximum term, as prescribed by accounting guidance on the use of the simplified method for determining the expected term of an employee share option. The expected dividend yield and volatility are based on historical stock prices and dividend amounts over past time periods equal in length to the expected life of the options. PPG applies an estimated forfeiture rate that is calculated based on historical activity.

The following weighted average assumptions were used to calculate the fair values of stock option grants in each year:

	2023	2022	2021
Weighted average exercise price	$130.17	$151.87	$136.60
Risk-free interest rate	3.9 %	2.0 %	1.0 %
Expected life of option in years	6.5	6.5	6.5
Expected dividend yield	1.7 %	1.6 %	1.6 %
Expected volatility	27.8 %	25.7 %	25.3 %

The weighted average fair value of options granted was $38.55 per share, $36.52 per share and $29.27 per share for the years ended December 31, 2023, 2022, and 2021, respectively.

Stock Options Outstanding and Exercisable	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Intrinsic Value (in millions)
Outstanding, January 1, 2023	3,517,451	$117.16	5.7	
Granted	410,001	$130.17		
Exercised	(566,439)	$96.64		
Forfeited/Expired	(42,250)	$138.64		
Outstanding, December 31, 2023	3,318,763	$122.00	5.7	$92
Vested or expected to vest, December 31, 2023	3,225,942	$121.44	5.6	$92
Exercisable, December 31, 2023	2,042,184	$110.97	4.1	$79

At December 31, 2023, unrecognized compensation cost related to outstanding stock options that have not yet vested totaled $9 million. This cost is expected to be recognized as expense over a weighted average period of 1.7 years.

The following table presents stock option activity for the years ended December 31, 2023, 2022 and 2021:

($ in millions)	2023	2022	2021
Total intrinsic value of stock options exercised	$24	$12	$32
Cash received from stock option exercises	$55	$12	$47
Income tax benefit from the exercise of stock options	$6	$3	$8
Total fair value of stock options vested	$10	$16	$11

Restricted Stock Units (“RSUs”)

Long-term incentive value is delivered to selected key management employees by granting RSUs, which have either time or performance-based vesting features. The fair value of an RSU is equal to the market value of a share of PPG common stock on the date of grant. Time-based RSUs generally vest over the three-year period following the date of grant, unless forfeited, and will be paid out in the form of stock, cash or a combination of both at the Company’s discretion at the end of the three year vesting period. Performance-based RSUs vest based on achieving specific annual performance targets for earnings per share growth and cash flow return on capital over the three calendar year-end periods following the date of grant. Unless forfeited, the performance-based RSUs will be paid out in the form of stock at the end of the three-year performance period if PPG meets the performance targets.

The amount paid upon vesting of performance-based RSUs may range from 0% to 200% of the original grant, based upon the level of earnings per share growth achieved and frequency with which the annual cash flow return on capital performance target is met over the three calendar year periods comprising the vesting period. Performance against the earnings per share growth and the cash flow return on capital goal is calculated annually, and the annual payout for each goal will be weighted equally over the three-year period. The performance-based RSUs granted in 2021 vested at 133%. PPG has assumed that performance-based RSUs granted in 2022 and 2023 will both vest at the 100% level.

RSU Activity	*Number of Shares*	*Weighted Average Grant Date Fair Value*
Outstanding, January 1, 2023	589,388	$136.99
Granted	321,045	$130.63
Vested	(271,037)	$131.14
Forfeited	(33,455)	$136.26
Outstanding, December 31, 2023	605,941	$137.96
Vested or expected to vest, December 31, 2023	569,073	$137.94

There was $22 million of total unrecognized compensation cost related to unvested RSUs outstanding as of December 31, 2023. This cost is expected to be recognized as expense over a weighted average period of 1.7 years.

Contingent Share Grants

The Company also provides grants of contingent shares to selected key executives that may be earned based on PPG's total shareholder return ("TSR") over the three-year period following the date of grant. Contingent share grants (referred to as "TSR awards") are made annually and are paid out at the end of each three-year period based on the Company's performance. Performance is measured by determining the percentile rank of the total shareholder return of PPG common stock in relation to the total shareholder return of the S&P 500 for the three-year period following the date of grant. This comparison group represents the entire S&P 500 Index as it existed at the beginning of the performance period, excluding any companies that have been removed from the index because they ceased to be publicly traded. The payout is based on performance achieved during the three-year period calculated in accordance with the scale set forth in the plan agreement and may range from 0% to 200% of the initial grant. A payout of 100% is earned if the target performance is achieved. Contingent share awards earn dividend equivalents for the award period, which will be paid to participants or credited to the participants' deferred compensation plan accounts with the award payout at the end of the period based on the actual number of contingent shares earned. Any payments made at the end of the award period may be in the form of stock, cash or a combination of both. The TSR awards are classified as liability awards, and compensation expense is recognized over the three-year award period based on the fair value of the awards (giving consideration to the Company's percentile rank of total shareholder return) remeasured in each reporting period until settlement of the awards.

The performance period for the TSR shares granted in 2021 ended on December 31, 2023, and PPG's total shareholder return was measured against that of the S&P 500 over the three-year period. PPG's ranking on this performance measure was at the 32nd percentile, resulting in payouts at 55.2% of target.

As of December 31, 2023, there was $9 million of total unrecognized compensation cost related to outstanding TSR awards based on the current estimate of fair value. This cost is expected to be recognized as expense over a weighted average period of 1.8 years.

20. Revenue Recognition

The Company recognizes revenue when control of the promised goods or services is transferred to the customer and in amounts that the Company expects to collect. The timing of revenue recognition takes into consideration the various shipping terms applicable to the Company's sales. For most transactions, control passes in accordance with agreed upon delivery terms.

The Company delivers products to company-owned stores, home centers and other regional or national consumer retail outlets, paint dealers, concessionaires and independent distributors, company-owned distribution networks, and directly to manufacturing companies and retail customers. Each product delivered to a third party customer is considered to satisfy a performance obligation. Performance obligations generally occur at a point in time and are satisfied when control of the goods passes to the customer. The Company is entitled to collection of the sales price under normal credit terms in the regions in which it operates. Accounts receivable are recognized when there is an unconditional right to consideration. Payment terms vary from customer to customer, depending on creditworthiness, prior payment history and other considerations.

The Company also provides services by applying coatings to customers' manufactured parts and assembled products and by providing technical support to certain customers. Performance obligations are satisfied over time as critical milestones are met and as services are provided. PPG is entitled to payment as the services are rendered. For the years ended December 31, 2023, 2022 and 2021, service revenue constituted less than 5% of total revenue.

Net sales by segment and region for the years ended December 31, 2023, 2022 and 2021 were as follows:

($ in millions)	***2023***	***2022***	***2021***
Performance Coatings			
United States and Canada	$4,912	$4,718	$4,366
EMEA	3,627	3,550	3,582
Asia Pacific	1,104	1,118	1,254
Latin America	1,521	1,308	1,131
Total	$11,164	$10,694	$10,333
Industrial Coatings			
United States and Canada	$2,576	$2,666	$2,310
EMEA	1,989	1,908	1,854
Asia Pacific	1,770	1,705	1,723
Latin America	747	679	582
Total	$7,082	$6,958	$6,469
Total Net Sales[(1)]			
United States and Canada[(2)]	$7,488	$7,384	$6,676
EMEA	5,616	5,458	5,436
Asia Pacific	2,874	2,823	2,977
Latin America	2,268	1,987	1,713
Total PPG	$18,246	$17,652	$16,802

(1) Net sales to external customers are attributed to geographic regions based upon the location of the operating unit shipping the product.

(2) Net sales recognized in the United States represented 37%, 38%, and 36% of the Company's total Net sales for the years ended December 31, 2023, 2022 and 2021, respectively.

Allowance for Doubtful Accounts

All trade receivables are reported on the consolidated balance sheet at the outstanding principal amount adjusted for any allowance for doubtful accounts and any charge-offs. PPG provides an allowance for doubtful accounts to reduce trade receivables to their estimated net realizable value equal to the amount that is expected to be collected. This allowance is estimated based on historical collection experience, current regional economic and market conditions, the aging of accounts receivable, assessments of current creditworthiness of customers and forward-looking information. The use of forward-looking information is based on certain macroeconomic and microeconomic indicators including, but not limited to, regional business environment risk, political risk, and commercial and financing risks.

PPG reviews its allowance for doubtful accounts on a quarterly basis to ensure the estimate reflects regional risk trends as well as current and future global operating conditions.

The following table summarizes allowance for doubtful accounts activity for the years ended December 31, 2023 and 2022:

	Trade Receivables Allowance for Doubtful Accounts	
($ in millions)	***2023***	***2022***
January 1	$31	$31
Bad debt expense	17	52
Write-offs and recoveries of previously reserved trade receivables	(21)	(55)
Other	(2)	3
December 31	$25	$31

In the first quarter 2022, PPG recorded a bad debt reserve of $43 million associated with the adverse economic impacts of the Russian invasion of Ukraine. Subsequently, the Company released a portion of this previously established bad debt reserve due to the collection of certain trade receivables, resulting in a bad debt reserve related to PPG's operations in Russia of $11 million at December 31, 2022. Refer to Note 7, "Impairment and Other Related Charges, Net" for additional information.

21. Reportable Business Segment Information

Segment Organization and Products

PPG is a multinational manufacturer with 10 operating segments (which the Company refers to as “strategic business units”) that are organized based on the Company’s major products lines. The Company’s reportable business segments include the following two segments: Performance Coatings and Industrial Coatings. The operating segments have been aggregated based on economic similarities, the nature of their products, production processes, end-use markets and methods of distribution.

The Performance Coatings reportable business segment is comprised of the automotive refinish coatings, aerospace coatings, architectural coatings – Americas and Asia Pacific, architectural coatings – EMEA, protective and marine coatings and traffic solutions operating segments. This reportable business segment primarily supplies a variety of protective and decorative coatings, adhesives, sealants and finishes, along with paint strippers, stains and related chemicals, pavement marking products, transparencies, transparent armor and paint films.

The Industrial Coatings reportable business segment is comprised of the automotive OEM coatings, industrial coatings, packaging coatings, and the specialty coatings and materials operating segments. This reportable business segment primarily supplies a variety of protective and decorative coatings and finishes along with adhesives, sealants, metal pretreatment products, optical monomers and coatings, low-friction coatings, paint films, precipitated silicas and other specialty materials.

Production facilities and sales for Performance Coatings and Industrial Coatings are global. PPG’s reportable business segments continue to pursue opportunities to further develop their global reach. Each of the reportable business segments in which PPG is engaged is highly competitive. The diversification of our product lines and the worldwide sales tend to minimize the impact on PPG’s business of changes in demand in a particular industry or in a particular geographic area.

The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies (see Note 1, “Summary of Significant Accounting Policies”). The Company allocates resources to operating segments and evaluates the performance of operating segments based upon segment income, which is income before interest expense – net, income taxes, and noncontrolling interests and excludes certain charges which are considered to be unusual or non-recurring. The Company also evaluates performance of operating segments based on working capital management and selling price and sales volume performance.

Corporate unallocated costs include the costs of corporate staff functions not directly associated with the operating segments, certain legal matters, net of related insurance recoveries, the cost of certain insurance and stock-based compensation programs and certain other unusual or non-recurring items. The service cost component of net periodic benefit cost related to current employees of each reportable business segment is allocated to that reportable business segment and the remaining portion of net periodic pension expense is included in the Corporate unallocated costs.

Product movement between Performance Coatings and Industrial Coatings is limited, is accounted for as an inventory transfer, and is recorded at cost plus a mark-up, the impact of which is not significant to the net sales or segment income of the reportable business segments.

($ in millions)	2023	2022	2021
Net sales to external customers			
Performance Coatings	$11,164	$10,694	$10,333
Industrial Coatings	7,082	6,958	6,469
Total Net sales	$18,246	$17,652	$16,802
Segment income			
Performance Coatings	$1,709	$1,399	$1,491
Industrial Coatings	966	643	680
Total Segment income	$2,675	$2,042	$2,171
Corporate / Non-Segment Items			
Corporate unallocated	(340)	(218)	(194)
Interest expense, net of interest income	(107)	(113)	(95)
Impairment and other related charges, net[1]	(160)	(245)	(21)
Business restructuring-related costs, net[2]	(43)	(75)	(27)
Portfolio optimization[3]	(53)	(10)	(86)
Pension settlement charge[4]	(190)	—	(50)
Environmental remediation charges, net[5]	(30)	—	(35)
Insurance recoveries[6]	16	—	—
Argentina currency devaluation losses[7]	(20)	—	—
Expenses incurred due to natural disasters[8]	—	—	(17)
Change in allowance for doubtful accounts related to COVID-19	—	—	14
Income from legal settlements	—	—	22
Asbestos-related claims reserve adjustment[9]	—	—	133
Total Income before income taxes	$1,748	$1,381	$1,815

($ in millions)	2023	2022	2021
Depreciation and amortization			
Performance Coatings	$279	$296	$308
Industrial Coatings	213	207	212
Corporate / Non-Segment Items	66	51	41
Total	$558	$554	$561
Share of net earnings of equity affiliates			
Performance Coatings	$7	$7	$5
Industrial Coatings	1	—	—
Corporate / Non-Segment Items	13	18	10
Total	$21	$25	$15
Segment assets[10]			
Performance Coatings	$13,434	$13,088	$13,395
Industrial Coatings	5,643	5,802	5,807
Corporate / Non-Segment Items	2,570	1,854	2,149
Total	$21,647	$20,744	$21,351
Investment in equity affiliates			
Performance Coatings	$48	$42	$33
Industrial Coatings	18	15	15
Corporate / Non-Segment Items	75	77	78
Total	$141	$134	$126
Expenditures for property (including business acquisitions)			
Performance Coatings	$343	$254	$1,698
Industrial Coatings	184	313	784
Corporate / Non-Segment Items	131	65	26
Total	$658	$632	$2,508

($ in millions)	2023	2022	2021
Geographic Information			
Segment income			
United States and Canada	$1,048	$819	$865
EMEA	679	505	612
Asia Pacific	430	332	354
Latin America	518	386	340
Total	$2,675	$2,042	$2,171
Property, plant and equipment — net			
United States and Canada	$1,559	$1,394	$1,377
EMEA	1,010	943	1,069
Asia Pacific	718	685	702
Latin America	357	306	294
Total	$3,644	$3,328	$3,442

(1) In the fourth quarter 2023, the company recorded impairment and other related charges due to goodwill impairment recognized for the traffic solutions reporting unit as a result of its annual goodwill impairment test. The fair value of the traffic solutions reporting unit decreased primarily due to increases in the cost of capital (discount rate assumption) and declines in the reporting unit's long-term forecast driven by challenges at its operations in Argentina due to the highly inflationary environment and changes to the reporting unit's global footprint, including the fourth quarter 2023 divestiture of its European and Australian businesses. In 2022, the company recorded impairment and other related charges due to the wind down of the company's operation in Russia. In 2021, impairment charges were recorded for the write-down of certain assets related to the previously planned sale of certain smaller entities in non-strategic regions.

(2) Business restructuring-related costs, net include business restructuring charges, offset by releases related to previously approved programs, which are included in Other charges/(income), net on the consolidated statement of income, accelerated depreciation of certain assets, which is included in Depreciation on the consolidated statement of income, and other restructuring-related costs, which are included in Cost of sales, exclusive of depreciation and amortization and Selling, general and administrative on the consolidated statement of income. Additionally, there was a $34 million gain on the sale of certain assets in 2021 in connection with the Company's manufacturing footprint consolidation plans and associated restructuring programs. This gain is included in Other (income)/charges, net in the consolidated statement of income.

(3) Portfolio optimization includes losses on the sale of non-core assets, including the losses recognized on the sales of the Company's European and Australian traffic solutions businesses in 2023, which are included in Other charges/(income), net in the consolidated statement of income, accelerated amortization expense recognized in 2023 related to the exit of a non-core business, which is included in Amortization in the consolidated statement of income, and the impact for the step up to fair value of inventory acquired in certain acquisitions, which is included in Cost of sales, exclusive of depreciation and amortization in the consolidated statement of income. Portfolio optimization also includes advisory, legal, accounting, valuation, other professional or consulting fees, and certain internal costs directly incurred to effect acquisitions, as well as similar fees and other costs to effect divestitures and other portfolio optimization exit actions. These costs are included in Selling, general and administrative expense in the consolidated statement of income.

(4) In the first quarter 2023, PPG purchased group annuity contracts that transferred pension benefit obligations for certain of the company's retirees in the U.S. to third-party insurance companies, resulting in a non-cash pension settlement charge. In 2021, the Company purchased group annuity contracts that transferred pension benefit obligations for certain of the Company's retirees in Canada to a third-party insurance company.

(5) Environmental remediation charges represent environmental remediation costs at certain legacy PPG manufacturing sites. These charges are included in Other charges/(income), net in the consolidated statement of income.

(6) In the first quarter 2023, the company received reimbursement under its insurance policies for damages incurred at a southern U.S. factory from a winter storm in 2020. In the fourth quarter 2023, the company received reimbursement for a previously approved insurance claim under a policy covering legacy asbestos-related matters. These insurance recoveries are included in Other charges/(income), net in the consolidated statement of income.

(7) In December 2023, the central bank of Argentina adjusted the official foreign currency exchange rate for the Argentine peso, significantly devaluing the currency relative to the United States dollar. Argentina currency devaluation losses represent foreign currency translation losses recognized during December 2023 related to the devaluation of the Argentine peso, which is included in Other charges/(income), net in the consolidated statement of income.

(8) In early 2021, a winter storm damaged certain company factories in the southern U.S. Incremental expenses incurred due to these storms included costs related to maintenance and repairs of damaged property, freight and utility premiums and other incremental expenses directly related to the impacted areas. These incremental expenses are included in Other charges/(income), net in the consolidated statement of income.

(9) In 2021, the reserve for asbestos-related claims was reduced to reflect the Company's current estimate of potential liability for these claims.

(10) Segment assets are the total assets used in the operation of each segment. Corporate assets principally include amounts recorded in Cash and cash equivalents, Deferred income taxes, and Property, plant and equipment, net on the consolidated balance sheet.

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

None.

Item 9A. Controls and Procedures

(a) Evaluation of disclosure controls and procedures.

Based on their evaluation as of the end of the period covered by this Form 10-K, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

(b) Changes in internal control over financial reporting.

There were no changes in the Company's internal control over financial reporting that occurred during the Company's quarter ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

(c) Management report on internal control over financial reporting.

Refer to Management Report on page 33 for management's annual report on internal control over financial reporting. Refer to Report of Independent Registered Public Accounting Firm on pages 31-32 for PricewaterhouseCoopers LLP's audit report on the Company's internal control over financial reporting.

Item 9B. Other Information

Rule 10b5-1 Trading Plans

During the quarter ended December 31, 2023, none of the Company's directors or officers, as defined in Section 16 of the Securities Exchange Act of 1934, adopted or terminated a "Rule 10b5-1 trading arrangement" or a "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K of the Securities Exchange Act of 1934.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The information about the Company's directors required by Item 10 and not otherwise set forth below is contained under the caption "Proposal 1: Election of Directors" in PPG's definitive Proxy Statement for the 2024 Annual Meeting of Shareholders (the "Proxy Statement") which the Company anticipates filing with the Securities and Exchange Commission, pursuant to Regulation 14A, not later than 120 days after the end of the Company's fiscal year, and is incorporated herein by reference.

The executive officers of the Company are elected by the Board of Directors. The information required by this item concerning the Company's executive officers is incorporated by reference herein from Part I of this report under the caption "Information About Our Executive Officers."

Information regarding the Company's Audit Committee is included in the Proxy Statement under the caption "Corporate Governance – Audit Committee" and is incorporated herein by reference.

Information regarding the Company's codes of ethics is included in the Proxy Statement under the caption "Corporate Governance – Codes of Ethics" and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by Item 11 is contained in the Proxy Statement under the captions "Compensation of Directors," "Compensation Discussion and Analysis," "Compensation of Executive Officers," "Potential Payments upon Termination or Change in Control," "Corporate Governance – Compensation Committee Interlocks and Insider Participation," and "Corporate Governance – Human Capital Management and Compensation Committee Report to Shareholders" and is incorporated herein by reference.

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

The information required by Item 12 is contained in the Proxy Statement under the captions “Beneficial Ownership” and “Equity Compensation Plan Information” and is incorporated herein by reference.

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

The information required by Item 13 is contained in the Proxy Statement under the captions “Corporate Governance – Director Independence,” “Corporate Governance – Review and Approval or Ratification of Transactions with Related Persons” and “Corporate Governance – Certain Relationships and Related Transactions” and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by Item 14 is contained in the Proxy Statement under the caption “Independent Registered Public Accounting Firm” and is incorporated herein by reference.

Part IV

Item 15. Exhibits, Financial Statement Schedules

(a)(1) Consolidated Financial Statements and Reports of Independent Registered Public Accounting Firm (see Part II, Item 8 of this Form 10-K).

The following information is filed as part of this Form 10-K:

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID 238)	31
Management Report	33
Consolidated Statement of Income for the Years Ended December 31, 2023, 2022 and 2021	34
Consolidated Statement of Comprehensive Income for the Years Ended December 31, 2023, 2022 and 2021	34
Consolidated Balance Sheet as of December 31, 2023 and 2022	35
Consolidated Statement of Shareholders’ Equity for the Years Ended December 31, 2023, 2022 and 2021	36
Consolidated Statement of Cash Flows for the Years Ended December 31, 2023, 2022 and 2021	37
Notes to the Consolidated Financial Statements	38

(a)(2) Consolidated Financial Statement Schedule for the years ended December 31, 2023, 2022 and 2021.

The following Consolidated Financial Statement Schedule should be read in conjunction with the previously referenced financial statements:

Schedule II – Valuation and Qualifying Accounts

Allowance for Doubtful Accounts for the Years Ended December 31, 2023, 2022, and 2021

($ in millions)	*Balance at Beginning of Year*	*Charged to Costs and Expenses(1)*	*Deductions(1, 2)*	*Balance at End of Year*
2023	$31	$17	($23)	$25
2022	$31	$52	($52)	$31
2021	$44	$5	($18)	$31

(1) In the first quarter 2022, PPG recorded a bad debt reserve of $43 million associated with the adverse economic impacts of the Russian invasion of Ukraine. Subsequently, the Company released a portion of this previously established bad debt reserve due to the collection of certain trade receivables. In 2020, PPG recorded an allowance for doubtful accounts of $30 million related to the potential financial impacts of COVID-19. In 2021, PPG released a portion of the previously established reserve due to improvement in economic conditions in certain countries and a slower pattern of bankruptcies than expected.

(2) Notes and accounts receivable written off as uncollectible, net of recoveries, amounts attributable to divestitures and changes attributable to foreign currency translation.

All other schedules are omitted because they are not applicable.

(a)(3) Exhibits. The following exhibits are filed as a part of, or incorporated by reference into, this Form 10-K.

Index to Exhibits

	3	Statement with Respect to Shares Eliminating the Series A Junior Participating Preferred Stock, was filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended September 30, 2014.
	3.1	Restated Articles of Incorporation of PPG Industries, Inc., was filed as Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended September 30, 2014.
	3.2	Articles of Amendment to the Restated Articles of Incorporation of PPG Industries, Inc., effective May 13, 2022, was filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 13, 2022.
	3.3	Amended and Restated Bylaws of PPG Industries, Inc., as amended on January 18, 2024, was filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on January 22, 2024.
	4	Indenture, dated as of March 18, 2008, was filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on March 18, 2008.
	4.1	Supplemental Indenture, dated as of March 18, 2008, was filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on March 18, 2008.
	4.2	Second Supplemental Indenture, dated as of November 12, 2010, was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on November 12, 2010.
	4.3	Third Supplemental Indenture, dated as of August 3, 2012, was filed as Exhibit 4.4 to the Registrant's Current Report on Form 8-K filed on August 3, 2012.
	4.4	Fifth Supplemental Indenture, dated as of March 13, 2015, between PPG Industries, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on March 13, 2015.
	4.5	Sixth Supplemental Indenture, dated as of November 3, 2016, between PPG Industries, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on November 3, 2016.
	4.6	Seventh Supplemental Indenture, dated as of February 27, 2018, between PPG Industries, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on February 27, 2018.
	4.7	Eighth Supplemental Indenture, dated as of August 15, 2019, between PPG Industries, Inc. and The Bank of New York Mellon Trust Company, N.A., was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on August 15, 2019.
	4.8	Ninth Supplemental Indenture, dated as of May 19, 2020, between PPG Industries, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on May 19, 2020.
	4.9	Tenth Supplemental Indenture, dated as of March 4, 2021, between PPG Industries, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on March 4, 2021.
	4.10	Eleventh Supplemental Indenture, dated as of May 25, 2022, between PPG Industries, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, was filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on May 25, 2022.
†	4.11	PPG Industries, Inc. Description of Securities.
*	10	PPG Industries, Inc. Nonqualified Retirement Plan, as amended and restated September 24, 2008, was filed as Exhibit 10 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2011.
*	10.1	Form of Change in Control Employment Agreement entered into with executives on or after January 1, 2008 through December 31, 2009, was filed as Exhibit 10.24 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2007.
*	10.2	Form of Change in Control Employment Agreement entered into with executives on or after January 1, 2010, was filed as Exhibit 10.3 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2009.
*	10.3	Form of Change in Control Employment Agreement entered into with executives on or after June 30, 2012 was filed as Exhibit 10.4 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2012.
*	10.4	Form of Change in Control Employment Agreement entered into with executives on or after January 1, 2014, was filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 2014.

*	10.5	PPG Industries, Inc. Deferred Compensation Plan for Directors related to compensation deferred prior to January 1, 2005, was filed as Exhibit 10.3 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 1997.
†	10.6	PPG Industries, Inc. Deferred Compensation Plan for Directors related to compensation deferred on or after January 1, 2005, as amended and restated effective January 1, 2024.
*	10.7	PPG Industries, Inc. Deferred Compensation Plan related to compensation deferred prior to January 1, 2005, as amended effective July 14, 2004, was filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2004.
*	10.8	PPG Industries, Inc. Deferred Compensation Plan related to compensation deferred on or prior to January 1, 2005, as amended and restated effective January 1, 2011, was filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2012.
*	10.9	PPG Industries, Inc. Executive Officers' Long Term Incentive Plan was filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated February 15, 2005.
*	10.10	PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan, was filed as Annex A to the Registrant's Definitive Proxy Statement for its 2011 Annual Meeting of Shareholders filed on March 10, 2011.
*	10.11	PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan, was filed as Annex B to the Registrant's Definitive Proxy Statement for its 2016 Annual Meeting of Shareholders filed on March 10, 2016.
†*	10.12	Form of Non-Qualified Stock Option Award Agreement.
†*	10.13	Form of TSR Share Award Agreement.
†*	10.14	Form of Performance-Based Restricted Stock Unit Award Agreement.
†*	10.15	Form of Time-Vested Restricted Stock Unit Award Agreement.
†*	10.16	Form of Time-Vested Restricted Stock Unit Award Agreement for Directors.
	10.17	Amended and Restated Five Year Credit Agreement dated as of August 30, 2019 among PPG Industries, Inc.; the several banks and financial institutions party thereto; JPMorgan Chase Bank, N.A., as administrative agent; BNP Paribas, Citibank, N.A. MUFG Bank, Ltd. and PNC Bank, National Association, as co-syndication agents; and J.P. Morgan Chase Bank, N.A., BNP Paribas Securities Corp., Citibank, N.A., MUFG Bank, Ltd. and PNC Capital Markets LLC, as co-lead arrangers and co-bookrunners, was filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 4, 2019.
	10.18	Amendment No. 1, dated as of March 23, 2023, to Five Year Credit Agreement, dated as of August 30, 2019, among PPG Industries, Inc.; the several banks and financial institutions party thereto; JPMorgan Chase Bank, N.A., as administrative agent; BNP Paribas, Citibank, N.A., MUFG Bank, Ltd. and PNC Bank, National Association, as co-syndication agents; and J.P. Morgan Chase Bank, N.A., BNP Paribas Securities Corp., Citibank, N.A., MUFG Bank, Ltd. and PNC Capital Markets LLC, as co-lead arrangers and co-bookrunners was filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on March 27, 2023.
	10.19	Term Loan Credit Agreement, dated as of February 19, 2021, among PPG Industries, Inc., the lenders parties thereto, BNP Paribas, as administrative agent, PNC Bank, National Association as syndication agent and BNP Paribas Securities Corp. and PNC Capital Markets LLC as co-lead arrangers and co-bookrunners was filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on February 23, 2021.
	10.20	Amendment No. 1, dated as of March 23, 2023, to Term Loan Credit Agreement, dated as of February 19, 2021, among PPG Industries, Inc., the lenders parties thereto, BNP Paribas, as administrative agent, PNC Bank, National Association, as syndication agent and BNP Paribas Securities Corp. and PNC Capital Markets LLC, as co-lead arrangers and co-bookrunners was filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on March 27, 2023.
	10.21	Term Loan Credit Agreement, dated as of April 12, 2023, among PPG Industries, Inc., the banks, financial institutions and other institutional lenders party thereto and Banco Bilbao Vizcaya Argentaria, S.A. New York Branch, as administrative agent was filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on April 18, 2023.

	10.22	Five Year Credit Agreement dated as of July 27, 2023 among PPG Industries, Inc.; the several banks and financial institutions party thereto; JPMorgan Chase Bank, N.A., as administrative agent; JPMorgan Chase Bank, N.A., PNC Capital Markets LLC, BNP Paribas Securities Corp, and Citibank, N.A. as joint lead arrangers and joint bookrunners; PNC Bank, National Association, BNP Paribas, and Citibank, N.A., as co-syndication agents; and Banco Bilbao Vizcaya Argentaria, S.A. New York Branch, Banco Santander, S.A., New York Branch, Bank of America, N.A., Goldman Sachs Bank USA, HSBC Bank USA, National Association, Intesa Sanpaolo S.P.A., New York Branch, Societe Generale, Sumitomo Mitsui Banking Corporation, The Toronto-Dominion Bank, New York Branch, Unicredit Bank AG, New York Branch, U.S. Bank National Association, and Wells Fargo Bank, National Association, as co-documentation agents was filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 31, 2023.
*	10.23	PPG Industries, Inc. Incentive Compensation Plan for Key Employees, as amended and restated on January 1, 2019 was filed as Exhibit 10.29 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2018.
*	10.24	PPG Industries, Inc. Management Award Plan, as amended and restated on January 1, 2019 was filed as Exhibit 10.30 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2018.
*	10.25	Time-Vested Restricted Stock Unit Award Agreement for Michael H. McGarry was filed as Exhibit 10.25 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2022.
†	13.1	Market Information, Dividends, Holders of Common Stock and Stock Performance Graph.
†	21	Subsidiaries of the Registrant.
†	23	Consent of PricewaterhouseCoopers LLP.
†	24	Powers of Attorney.
†	31.1	Certification of Principal Executive Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
†	31.2	Certification of Principal Financial Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
††	32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
††	32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
†	97.1	PPG Industries, Inc. Compensation Recovery Policy Adopted by the Board of Directors on July 20, 2023
**	101.INS	Inline XBRL Instance 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	Inline XBRL for the cover page of this Annual Report on Form 10-K, included in the Exhibit 101 Inline XBRL Document Set.

† Filed herewith.

†† Furnished herewith.

* Management contracts, compensatory plans or arrangements required to be filed as an exhibit hereto pursuant to Item 601 of Regulation S-K.

** Attached as Exhibit 101 to this report are the following documents formatted in Inline XBRL (Extensible Business Reporting Language) as of and for the year ended December 31, 2023: (i) the Consolidated Statement of Income, (ii) the Consolidated Balance Sheet, (iii) the Consolidated Statement of Shareholders' Equity, (iv) the Consolidated Statement of Comprehensive Income (Loss), (v) the Consolidated Statement of Cash Flows, (vi) Notes to Consolidated Financial Statements and (vii) Financial Schedule of Valuation and Qualifying Accounts.

Item 16. Form 10-K Summary

None.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized on February 15, 2024.

PPG INDUSTRIES, INC.
(Registrant)

By: /s/ Vincent J. Morales
Vincent J. Morales
Senior Vice President and Chief Financial Officer (Principal Financial Officer and Duly Authorized Officer)

By: /s/ Brian R. Williams
Brian R. Williams
Vice President and Controller (Principal Accounting Officer and Duly Authorized Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities indicated on February 15, 2024.

Signature	Capacity
/s/ Timothy M. Knavish Timothy M. Knavish	Chairman and Chief Executive Officer
/s/ Vincent J. Morales Vincent J. Morales	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Duly Authorized Officer)
/s/ Brian R. Williams Brian R. Williams	Vice President and Controller (Principal Accounting Officer and Duly Authorized Officer)
S. F. Angel	Director
M. L. Healey	Director
G. R. Heminger	Director
M. W. Lamach	Director
K. A. Ligocki	Director
M. T. Nally	Director
G. Novo	Director
M. H. Richenhagen	Director
C. N. Roberts III	Director
C. R. Smith	Director

By: /s/ Vincent J. Morales
Vincent J. Morales, Attorney-in-Fact

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of February 15, 2024, PPG Industries, Inc. (the "Company") has five classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): (1) its common stock, par value $1.66 2/3 per share (the "Common Stock"); (2) its 0.875% Notes due 2025 (the "2025 Notes"); (3) its 1.875% Notes due 2025 (the "2025A Notes"); (4) its 1.400% Notes due 2027 (the "2027 Notes"); and (5) its 2.750% Notes due 2029 (the "2029 Notes" and together with the 2025 Notes and the 2027 Notes, the "Notes").

Description of the Common Stock

The following description of the Common Stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to the Company's Restated Articles of Incorporation, as amended (the "Articles of Incorporation"), and the Company's Amended and Restated Bylaws (the "Bylaws"), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.11 is a part. The Company encourages interested parties to read the Articles of Incorporation, the Bylaws and the applicable provisions of the Pennsylvania Business Corporation Law for additional information.

Authorized Capital Shares

The Company's authorized capital shares consist of 1,200,000,000 shares of Common Stock and 10,000,000 shares of preferred stock, without par value (the "Preferred Stock"). The outstanding shares of the Common Stock are fully paid and nonassessable.

Voting Rights

Holders of the Common Stock are entitled to one vote per share on all matters submitted to a vote of the Company's shareholders, including the election of directors. There are no cumulative voting rights associated with the Common Stock.

Dividend Rights

Subject to the rights of holders of outstanding shares of the Preferred Stock, if any, the holders of the Common Stock are entitled to receive dividends when, as and if declared by the Company's Board of Directors in its discretion out of funds legally available for the payment of dividends.

Liquidation Rights

Subject to any preferential rights of outstanding shares of the Preferred Stock, if any, holders of the Common Stock will be entitled to share ratably in any of the Company's assets legally available for distribution to the Company's shareholders after the payment in full of all debts and distributions in the event of the dissolution of the Company.

Other Rights and Preferences

There are no sinking fund or redemption provisions or preemptive, conversion or exchange rights applicable to the Common Stock.

Listing

The Common Stock is listed on The New York Stock Exchange and trades under the symbol "PPG."

Description of the Notes

The following description of the Notes is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to the Indenture, dated as of March 18, 2008 (the "Base Indenture"), between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"), as supplemented by (i) the First Supplemental Indenture, dated as of March 18, 2008 (the "First Supplemental Indenture"), (ii) in the case of the 2027 Notes, also by the Fifth Supplemental Indenture, dated as of March 13, 2015 (the "Fifth Supplemental Indenture"), (iii) in the case of the 2025 Notes, also by the Sixth Supplemental Indenture, dated as of November 3, 2016 (the "Sixth Supplemental Indenture") and (iv) in the case of the 2025A Notes and the 2027 Notes, also by the Eleventh Supplemental Indenture, dated as of May 25, 2022 (the "Eleventh Supplemental Indenture"). The Base Indenture, the First Supplemental Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture and the Eleventh Supplemental Indenture are incorporated by reference as exhibits to the Annual Report on Form 10-K of which this Exhibit 4.11 is a part. The 2025 Notes, the 2025A Notes, the 2027 Notes and the 2029 Notes each are listed on The New York Stock Exchange and trade under the bond trading symbols of "PPG25", "PPG25A", "PPG27" and "PPG29A," respectively.

In the following description, the Base Indenture as supplemented through the date of the filing of the Annual Report on Form 10-K of which this Exhibit 4.11 is a part is referred to as the "Indenture." The Company encourages interested parties to read the Indenture for additional information.

General

The 2025 Notes and the 2027 Notes each initially were issued in the aggregate principal amount of €600,000,000. The 2025A Notes initially were issued in the aggregate principal amount of €300,000,000 and the 2029 Notes initially were issued in the aggregate principal amount of €700,000,000. The Company is permitted to issue additional Notes of each series without the consent of the holders of that series, but the Company will not issue such additional Notes unless they are fungible for U.S. federal income tax purposes with the relevant series of Notes or are issued under a different CUSIP number. As of February 15, 2024, no such additional Notes have been issued.

The Notes are the Company's direct, unsecured and unsubordinated obligations and rank equally and ratably with all of the Company's other unsecured and unsubordinated indebtedness. The Notes are effectively subordinated to all of the Company's current and future secured indebtedness.

The maturity dates of the 2025A Notes, 2025 Notes, 2027 Notes, and the 2029 Notes are June 1, 2025, November 3, 2025, March 13, 2027 and June 1, 2029, respectively.

The Notes of each series are in the form of one or more global notes that the Company has deposited with or on behalf of a common depositary for the accounts of Clearstream Banking, société anonyme ("Clearstream") and Euroclear Bank, S.A./N.V. ("Euroclear") and are registered in the name of the nominee of the common depositary. The Company has appointed The Bank of New York Mellon, London Branch to act as paying agent, registrar and transfer agent in connection with the Notes, as well as to serve as the common depositary for the Notes. The Bank of New York Mellon, London Branch is an affiliate of the Trustee. The term "paying agent" includes The Bank of New York Mellon, London Branch and any successors appointed from time to time in accordance with the provisions of the Indenture. The Company has designated as an agency where the Notes may be presented for payment, exchange or

registration of transfer, in each case as provided in the Indenture, the office of the paying agent at One Canada Square, London E14 5AL.

The Notes of each series were issued in euro and only in minimum denominations of €100,000 and integral multiples of €1,000 in excess thereof.

The Notes are not redeemable at the option of the holder prior to maturity and are not subject to any sinking fund.

Interest and Principal

The 2027 Notes bear interest from March 13, 2015 at a fixed interest rate of 1.400% per annum. The 2025 Notes bear interest from November 3, 2016 at a fixed interest rate of 0.875% per annum. The 2025A Notes bear interest from June 1, 2022 at a fixed interest rate of 1.875% per annum. The 2029 Notes bear interest from June 1, 2022 at a fixed interest rate of 2.750% per annum. Interest is paid annually on June 1 for the 2025A Notes and the 2025 Notes, March 13 for the 2027 Notes, and on November 3 for the 2025 Notes, including on the maturity date of each series of Notes (each an "interest payment date"). The Company will pay interest on the Notes to the persons in whose names the Notes are registered at the close of business on the February 26 or October 19, as applicable (in each case, whether or not a business day), immediately preceding the related interest payment date. Interest on each series of Notes will be computed on the basis of the actual number of days in the period for which interest is being calculated and the actual number of days from and including the last date on which interest was paid on the applicable series of Notes, to but excluding the next date on which interest is paid or duly provided for. This payment convention is referred to as ACTUAL/ACTUAL (ICMA) as defined in the rulebook of the International Capital Market Association.

The Company will pay the principal of and interest on each note to the registered holder in euro in immediately available funds; *provided* that, if the euro is unavailable to the Company due to the imposition of exchange controls or other circumstances beyond the Company's control or if the euro is no longer being used by the then member states of the Eurozone (other than Greece) or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the Notes will be made in U.S. dollars until the euro is again available to the Company or so used. In such circumstances, the amount payable on any date in euro will be converted into U.S. dollars on the basis of the most recently available market exchange rate for euro, as determined by the Company in its sole discretion. Any payment in respect of the Notes so made in U.S. dollars will not constitute an event of default under any series of the Notes or the Indenture. So long as the Notes of a particular series are in book-entry form, the Company will make payments of principal and interest with respect to that series of Notes through the London paying agent described below.

Optional Redemption

Prior to August 3, 2025, the 2025 Notes are redeemable in whole or in part, at the Company's option, at any time and from time to time at a redemption price equal to the greater of (i) 100% of the principal amount of the 2025 Notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments of principal and interest thereon discounted to the redemption date on an annual basis (ACTUAL/ACTUAL (ICMA)) at the applicable Comparable Government Bond Rate, plus 15 basis points, plus accrued interest thereon to the date of redemption. On or after August 3, 2025, the Company may redeem some or all of the 2025 notes, in whole or in part, at its option, at any time and from time to time at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued interest thereon to the date of redemption.

Prior to May 1, 2025, the 2025A Notes are redeemable in whole or in part, at the Company's option, at any time and from time to time at a redemption price equal to the greater of (i) 100% of the principal amount of the 2025A Notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments of principal and interest thereon discounted to the redemption date on an annual basis (ACTUAL/ACTUAL (ICMA)) at the applicable Comparable Government Bond Rate, plus 25 basis points, plus accrued interest thereon to the date of redemption. On or after May 1, 2025, the Company may redeem some or all of the 2025A notes, in whole or in part, at its option, at any time and from time to time at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued interest thereon to the date of redemption.

Prior to December 13, 2026, the 2027 Notes are redeemable in whole or in part, at the Company's option, at any time and from time to time at a redemption price equal to the greater of (i) 100% of the principal amount of the notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments of principal and interest thereon discounted to the redemption date on an annual basis (ACTUAL/ACTUAL (ICMA)) at the applicable Comparable Government Bond Rate, plus 20 basis points, plus accrued interest thereon to the date of redemption. On or after December 13, 2026, the Company may redeem some or all of the 2027 Notes, in whole or in part, at its option, at any time and from time to time at a redemption price equal to 100% of the principal amount of the 2027 Notes to be redeemed, plus accrued interest thereon to the date of redemption.

Prior to April 1, 2029, the 2029 Notes are redeemable in whole or in part, at the Company's option, at any time and from time to time at a redemption price equal to the greater of (i) 100% of the principal amount of the 2029 Notes to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments of principal and interest thereon discounted to the redemption date on an annual basis (ACTUAL/ACTUAL (ICMA)) at the applicable Comparable Government Bond Rate, plus 30 basis points, plus accrued interest thereon to the date of redemption. On or after April 1, 2029, the Company may redeem some or all of the 2029 notes, in whole or in part, at its option, at any time and from time to time at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued interest thereon to the date of redemption.

The redemption price for the Notes will include, in each case, accrued and unpaid interest on the principal amount of the Notes to be redeemed to the redemption date. The redemption price paid for the Notes upon any such redemption will be paid in euro.

"Comparable Government Bond Rate" means, with respect to any redemption date for each series of Notes, the price, expressed as a percentage (rounded to three decimal places, with 0.0005 being rounded upwards), at which the gross redemption yield on the notes to be redeemed, if they were to be purchased at such price on the third business day prior to the date fixed for redemption, would be equal to the gross redemption yield on such business day of the Comparable Government Bond (as defined below) on the basis of the middle market price of the Comparable Government Bond prevailing at 11:00 a.m. (London time) on such business day as determined by an independent investment bank selected by the Company.

"Comparable Government Bond" means, with respect to each series of Notes, in relation to any Comparable Government Bond Rate calculation, at the discretion of an independent investment bank selected by us, a German government bond whose maturity is closest to the maturity of the Notes to be redeemed, or if such independent investment bank in its discretion determines that such similar bond is not in issue, such other German government bond as such independent investment bank may, with the advice of three brokers of, and/or market makers in, German government bonds selected by the Company, determine to be appropriate for determining the Comparable Government Bond Rate.

"Remaining Scheduled Payments" means, with respect to each series of Notes to be redeemed, the remaining scheduled payments of the principal thereof and interest thereon that would be due after the related redemption date but for such redemption; *provided, however*, that, if such redemption date is not an interest payment date with respect to such Notes, the amount of the next succeeding scheduled interest payment thereon will be deemed to be reduced by the amount of interest accrued thereon to such redemption date.

Unless the Company defaults in payment of the applicable redemption price, on and after the redemption date, interest will cease to accrue on the Notes or portions thereof called for redemption. If less than all of any series of Notes are to be redeemed, the Notes of the series to be redeemed will be selected by the trustee by such method the trustee deems to be fair and appropriate in accordance with applicable depositary procedures.

Redemption for Tax Reasons

If, as a result of any change in, or amendment to, the laws (or any regulations or rulings promulgated under the laws) of the United States (or any taxing authority in the United States), or any change in, or amendments to, an official position regarding the application or interpretation of such laws, regulations or rulings, the Company becomes or, based upon a written opinion of independent counsel selected by the Company, the Company will become obligated to pay additional amounts as described below under the heading "- Payment of Additional Amounts" with respect to the Notes, then the Company may at any time at the Company's option redeem, in whole, but not in part, the Notes at a redemption price equal to 100% of their principal amount, together with accrued and unpaid interest (including any additional amounts) on those Notes to, but not including, the date fixed for redemption.

Payment of Additional Amounts

The Company will, subject to the exceptions and limitations set forth below, pay as additional interest on the Notes of each series such additional amounts as are necessary in order that the net amount of the principal of and interest on the Notes received by a beneficial owner who is not a United States person (as defined below), after withholding or deduction for any present or future tax, assessment or other governmental charge imposed by the United States or a taxing authority in the United States, will not be less than the amount that would have been received by such beneficial owner if such tax had not been withheld or deducted; provided, however, that the foregoing obligation to pay additional amounts shall not apply:

1. to any tax, assessment or other governmental charge that is imposed by reason of the holder (or the beneficial owner for whose benefit such holder holds such Note), or a fiduciary, settlor, beneficiary, member or shareholder of the holder or beneficial owner if the holder or beneficial owner is an estate, trust, partnership or corporation, or a person holding a power over an estate or trust administered by a fiduciary holder, being considered as:

   a. being or having been engaged in a trade or business in the United States or having or having had a permanent establishment in the United States;

   b. having a current or former connection with the United States (other than a connection arising solely as a result of the ownership of the notes, the receipt of any payment or the enforcement of any rights hereunder), including being or having been a citizen or resident of the United States;

c. being or having been a personal holding company, a passive foreign investment company or a controlled foreign corporation for United States income tax purposes or a corporation that has accumulated earnings to avoid United States federal income tax; or

d. being or having been a "10-percent shareholder" of the Company as defined in section 871(h)(3) of the United States Internal Revenue Code of 1986, as amended (the "Code") or any successor provision;

2. to any holder that is not the sole beneficial owner of the Notes, or a portion of the Notes, or that is a fiduciary, partnership or limited liability company, but only to the extent that a beneficial owner with respect to the holder, a beneficiary or settlor with respect to the fiduciary, or a beneficial owner or member of the partnership or limited liability company would not have been entitled to the payment of an additional amount had the beneficiary, settlor, beneficial owner or member received directly its beneficial or distributive share of the payment;

3. to any tax, assessment or other governmental charge that would not have been imposed but for the failure of the holder or any other person to comply with certification, identification or information reporting requirements concerning the nationality, residence, identity or connection with the United States of the holder or beneficial owner of the Notes, if compliance is required by statute, by regulation of the United States or any taxing authority therein or by an applicable income tax treaty to which the United States is a party as a precondition to exemption from such tax, assessment or other governmental charge;

4. to any tax, assessment or other governmental charge that is imposed otherwise than by withholding by the Company or a paying agent from the payment;

5. to any tax, assessment or other governmental charge that would not have been imposed but for a change in law, regulation, or administrative or judicial interpretation that
becomes effective more than 15 days after the payment becomes due or is duly provided for, whichever occurs later;

6. to any estate, inheritance, gift, sales, excise, transfer, wealth, capital gains or personal property tax or similar tax, assessment or other governmental charge;

7. to any tax, assessment or other governmental charge required to be withheld by any paying agent from any payment of principal of or interest on any note, if the holder or beneficial owner would have been able to avoid such withholding by presenting the Note (where presentation is required) to another available paying agent;

8. to any tax, assessment or other governmental charge that would not have been imposed but for the presentation by the holder of any Note, where presentation is required, for payment on a date more than 30 days after the date on which payment became due and payable or the date on which payment thereof is duly provided for, whichever occurs later;

9. to any tax, assessment or other governmental charge that is imposed or withheld solely by reason of the beneficial owner being a bank (i) purchasing the Notes in the ordinary course of its lending business or (ii) that is neither (A) buying the Notes for investment purposes only nor (B)

buying the Notes for resale to a third-party that either is not a bank or holding the Notes for investment purposes only;

10. to any tax, assessment or other governmental charge imposed under Sections 1471 through 1474 of the Code (or any amended or successor provisions), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Code or any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of such sections of the Code; or

11. in the case of any combination of items (1), (2), (3), (4), (5), (6), (7), (8), (9) and (10).

The Notes are subject in all cases to any tax, fiscal or other law or regulation or administrative or judicial interpretation applicable to the Notes. Except as specifically provided under this heading, the Company will not be required to make any payment for any tax, assessment or other governmental charge imposed by any government or a political subdivision or taxing authority of or in any government or political subdivision with respect to the Notes.

As used under this heading and under the heading "-Redemption for Tax Reasons," the term "United States" means the United States of America, the states of the United States, the District of Columbia, and any political subdivision thereof, and the term "United States person" means any individual who is a citizen or resident of the United States for U.S. federal income tax purposes, a corporation, partnership or other entity created or organized in or under the laws of the United States, any state of the United States or the District of Columbia (other than a partnership that is not treated as a United States person under any applicable Treasury regulations), or any estate or trust the income of which is subject to United States federal income taxation regardless of its source.

Book-Entry and Settlement

The Company has obtained the information under this heading "- Book-Entry and Settlement" concerning Clearstream and Euroclear and their book-entry systems and procedures from sources that the Company believes to be reliable. The Company takes no responsibility for an accurate portrayal of this information. In addition, the description of the clearing systems under this heading "- Book-Entry and Settlement" reflects the Company's understanding of the rules and procedures of Clearstream and Euroclear as they are currently in effect. Those clearing systems could change their rules and procedures at any time.

The Notes of each series are represented by one or more fully registered global notes. Each such global note has been deposited with, or on behalf of, a common depositary, and registered in the name of the nominee of the common depositary for the accounts of Clearstream and Euroclear. Each such global security was deposited with The Bank of New York Mellon, as common depositary (the "Common Depositary") and registered in the name of the Common Depositary or its nominee.

Except as set forth below, the global notes may be transferred, in whole and not in part, only to Euroclear or Clearstream or their respective nominees. A holder may hold its interests in the global notes in Europe through Clearstream or Euroclear, either as a participant in such systems or indirectly through organizations which are participants in such systems. Clearstream and Euroclear will hold interests in the global notes on behalf of their respective participating organizations or customers through customers' securities accounts in Clearstream's or Euroclear's names on the books of their respective depositaries. Book-entry interests in the Notes and all transfers relating to the Notes are reflected in the book-entry records of Clearstream and Euroclear. The address of Clearstream is 42 Avenue JF Kennedy, L-1855

Luxembourg, Luxembourg, and the address of Euroclear is 1 Boulevard Roi Albert II, B-1210 Brussels, Belgium.

Any secondary market trading of book-entry interests in the Notes will take place through Clearstream and Euroclear participants and will settle in same-day funds. Owners of book-entry interests in the Notes will receive payments relating to their Notes in euro, except as described above.

Clearstream and Euroclear have established electronic securities and payment transfer, processing, depositary and custodial links among themselves and others, either directly or through custodians and depositaries. These links allow the Notes to be issued, held and transferred among the clearing systems without the physical transfer of certificates. Special procedures to facilitate clearance and settlement have been established among these clearing systems to trade securities across borders in the secondary market.

The policies of Clearstream and Euroclear will govern payments, transfers, exchanges and other matters relating to the investor's interest in the Notes held by them. The Company has no responsibility for any aspect of the records kept by Clearstream or Euroclear or any of their direct or indirect participants. The Company also does not supervise these systems in any way.

Clearstream and Euroclear and their participants perform these clearance and settlement functions under agreements they have made with one another or with their customers. They are not obligated to perform or continue to perform these procedures and may modify them or discontinue them at any time.

Except as provided below, owners of beneficial interests in the Notes are not entitled to have the Notes registered in their names, will not receive or be entitled to receive physical delivery of the Notes in definitive form and will not be considered the owners or holders of the Notes under the Indenture, including for purposes of receiving any reports delivered by the Company or the Trustee pursuant to the Indenture. Accordingly, each person owning a beneficial interest in a Note must rely on the procedures of the depositary and, if such person is not a participant, on the procedures of the participant through which such person owns its interest, in order to exercise any rights of a holder of Notes.

Certificated Notes

If the depositary for any of the Notes represented by a registered global note is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by the Company within 90 days, the Company will issue Notes in definitive form in exchange for the registered global note that had been held by the depositary. Any Notes issued in definitive form in exchange for a registered global note will be registered in the name or names that the depositary gives to the Trustee or other relevant agent of the Trustee. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global note that had been held by the depositary. In addition, the Company may at any time determine that the Notes shall no longer be represented by a global note and will issue Notes in definitive form in exchange for such global note pursuant to the procedure described above.

Trustee, Paying Agents and Security Registrar

The Bank of New York Mellon Trust Company, N.A. is the trustee under the Indenture governing the Notes. The Bank of New York Mellon, London Branch, is the paying agent for the notes in London.

Base Indenture Provisions

Governing Law

The Notes and the Indenture are governed by the laws of the State of New York.

Consolidation, Merger and Sale of Assets

The Company may not merge or consolidate with any other entity or sell or convey all or substantially all of its assets to any person, firm, corporation or other entity, except that the Company may merge or consolidate with, or sell or convey all or substantially all of its assets to, any other entity if:

- the Company is the continuing entity or the successor entity (if other than us) is organized and existing under the laws of the United States of America, a State thereof or the District of Columbia and the successor entity expressly assumes payment of the principal of and interest on all the debt securities, and the performance and observance of all of the covenants and conditions of the Indenture to be performed by the Company; and
- there is no default under the Indenture.

Upon such a succession, the Company will be relieved from any further obligations under the applicable indenture. For purposes of this subsection, "substantially all of the Company's assets" means, at any date, a portion of the non-current assets reflected in the Company's consolidated balance sheet as of the end of the most recent quarterly period that represents at least 66 2/3% of the total reported value of such assets.

Events of Default

A holder of Notes will have special rights if an Event of Default occurs and is not cured. The term "Event of Default" means any of the following with respect to a series of Notes:

- the Company does not pay interest on a series of Notes within 30 days of the due date;
- the Company does not pay the principal of or premium, if any, on a series of Notes on the applicable due date;
- the Company does not pay any sinking fund installment on a series of Notes within 30 days of the due date;
- the Company remains in breach of any other covenant or warranty in Notes of such series or in the Indenture for 90 days after the Company receives a notice of default stating that the Company is in breach, as provided in the Indenture; or
- certain events of bankruptcy, insolvency or reorganization occur.

Remedies If an Event of Default Occurs.

If an Event of Default has occurred and continues with respect to a series of Notes, the Trustee or the holders of not less than 25% in principal amount of the Notes of the affected series may declare the entire principal amount of all of Notes of the affected series to be due and immediately payable. This is called a "declaration of acceleration of maturity." Under some circumstances, a declaration of

acceleration of maturity may be canceled by the holders of at least a majority in principal amount of the Notes of that series.

The Trustee generally is not required to take any action under the Indenture at the request of any holders unless one or more of the holders has provided to the Trustee security or indemnity reasonably satisfactory to it.

If reasonable protection from expenses and liabilities is provided, the holders of a majority in principal amount of the outstanding Notes of the relevant series may direct the time, method and place of conducting any lawsuit or other formal legal action seeking any remedy available to the Trustee and to waive certain past defaults regarding the relevant series. The Trustee may refuse to follow those directions in some circumstances.

If an Event of Default occurs and is continuing regarding a series of Notes, the Trustee may use any sums that it holds under the Indenture for its own reasonable compensation and expenses incurred prior to paying the holders of Notes of that series.

Before any holder of any series of Notes may institute an action for any remedy, except payment on such holder's debt security when due, the holders of not less than 25% in principal amount of the Notes of that series outstanding must request the Trustee to take action. Holders must also offer and give the Trustee satisfactory security and indemnity against liabilities incurred by the Trustee for taking such action.

"Street Name" and other indirect holders should consult their banks or brokers for information on how to give notice or direction to or make a request of the Trustee and to make or cancel a declaration of acceleration.

The Company will furnish every year to the Trustee a written statement of certain of the Company's officers certifying that, to their knowledge, the Company is in compliance with the Indenture and the Notes, or else specifying any default.

No Event of Default regarding one series of Notes is necessarily an Event of Default regarding any other series of Notes.

Satisfaction and Discharge

The Indenture will be satisfied and discharged if:

- the Company delivers to the Trustee all debt securities then outstanding under the Indenture, including any Notes then outstanding, for cancellation; or

- all debt securities under the Indenture not delivered to the Trustee for cancellation, including any Notes then outstanding, have become due and payable, are to become due and payable within one year or are to be called for redemption within one year and the Company deposits an amount sufficient to pay the principal, premium, if any, and interest to the date of maturity, redemption or deposit (in the case of debt securities that have become due and payable), as the case may be, provided that in any case the Company has paid all other sums payable under the Indenture.

Defeasance and Covenant Defeasance

The Indenture provides that:

- the Company may elect either:

- to defease and be discharged from any and all obligations with respect to any Notes of such series (except for the obligations to register the transfer or exchange of such Notes, to replace temporary or mutilated, destroyed, lost or stolen Notes, to maintain an office or agency in respect of the Notes and to hold moneys for payment in trust) ("defeasance"); or

- to be released from its obligations with respect to applicable restrictions under the Base Indenture; and

- the Events of Default described in the third, fourth and sixth bullets under "- Events of Default" above will not be Events of Default under the Indenture with respect to such series of Notes ("covenant defeasance"), upon the deposit with the Trustee (or other qualifying trustee), in trust for such purpose, of money or certain U.S. government obligations which through the payment of principal and interest in accordance with their terms will provide money, in an amount sufficient to pay the principal of (and premium, if any) and interest on such Notes, on the scheduled due dates.

In the case of defeasance, the holders of such Notes are entitled to receive payments in respect of such Notes solely from such trust. Such a trust may only be established if, among other things, the Company has delivered to the Trustee an opinion of counsel (as specified in the Indenture) to the effect that the holders of the Notes affected thereby will not recognize income, gain or loss for federal income tax purposes as a result of such defeasance or covenant defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such defeasance or covenant defeasance had not occurred. Such opinion of counsel, in the case of defeasance described above, must refer to and be based upon a ruling of the Internal Revenue Service or a change in applicable federal income tax law occurring after the date of the Indenture.

PPG INDUSTRIES, INC.

DEFERRED COMPENSATION PLAN

Preamble

The Plan is adopted primarily for the purpose of providing deferred compensation to a select group of management and highly compensated employees.

This PPG Industries, Inc. Deferred Compensation Plan (this "Plan") is an amendment and restatement of the PPG Industries, Inc. Deferred Compensation Plan as in effect on December 12, 2007 (the "Prior Plan"). Except as otherwise provided herein, this amended and restated Plan applies to deferrals of all compensation that is earned or that becomes vested on or after January 1, 2005 (including any earnings thereon) (except that the Plan was operated in good faith compliance with the requirements of Section 409A of the Internal Revenue Code for periods prior to January 1, 2008). All such deferred compensation shall be paid in accordance with the terms of this amended and restated Plan. The Prior Plan applies to deferrals of all compensation that was earned and vested prior to January 1, 2005 (including any earnings thereon). This amendment and restatement of the Plan is made on December 13, 2023, and is effective as of January 1, 2024, except as otherwise provided.

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SECTION I - DEFINITIONS

1.01 **Account** means all deferred Award amounts, all deferred Salary amounts, all deferred Payments pursuant to the LTIP or Executive Officers' LTIP, all deferred Omnibus Plan Stock Awards, all Savings Plan Restoration Contributions and all Defined Contribution Retirement Plan Restoration Contributions and earnings on each of the foregoing held at any particular time in the form of Stock Account Shares or Investment Account Shares in a Participant's account established pursuant to the terms hereof.

1.02 **Administrator** means an officer or officers of the Company appointed by the Committee, and any person(s) designated by such Administrator to assist in the administration of the Plan.

1.03 **Affiliate** means any business entity, other than a Subsidiary, in which PPG has an equity interest.

1.04 **Annual Plan** means the PPG Industries, Inc. Executive Officers' Annual Incentive Compensation Plan, as amended from time to time.

1.05 **Award** means a grant to a Participant under the IC Plan, MAP or the Annual Plan, and a Short-Term Cash Incentive Award under Article X of the Omnibus Plan which such person may elect to defer.

1.06 **Beneficiary** means the person or persons designated by a Participant to receive benefits hereunder following the Participant's death, in accordance with Section 6.02. For purposes of this Section 1.06, "person or persons" is limited to an individual, a Trustee or a Participant's estate.

1.07 **Board** means the Board of Directors of PPG Industries, Inc.

1.08 **Code** means the Internal Revenue Code of 1986, and amendments thereto.

1.09 **Committee** means the Officers-Directors Compensation Committee (or any successor) of the Board.

1.10 **Company or PPG** means PPG Industries, Inc.

1.11 **Conversion Formula** means, with respect to the cash component of an Award, the number of Stock Account Shares obtained by dividing such Award amount by the closing price as reported on the New York Stock Exchange Composite Tape of PPG Stock on the date payment of the Award is processed.

1.12 **Corporation** means PPG and any Subsidiary or Affiliate designated by the Administrator to permit such Subsidiary's or Affiliate's employees to participate in the Plan, and which, by proper authorization of the board of directors or other governing body of such Subsidiary or Affiliate, elects to participate in the Plan.

1.13 **Defined Contribution Plan Restoration Contributions** means contributions to a Participant's Account in accordance with Section 4.02.

1.14 **Disability** means a medical or physical impairment that can be expected to result in death or that can be expected to last for a continuous period of not less than 12 months, by reason of which, a Participant has received income replacement benefits for a period of not less than six months under the Corporation's disability plans, within the meaning of Section 409A of the Code.

1.15 **Employee** means any full-time or permanent part-time salaried employee (including any officer) of the Corporation.

1.16 **ERISA** means the Employee Retirement Income Security Act of 1974, as amended.

1.17 **Executive Officers' LTIP** means the PPG Industries, Inc Executive Officers' Long Term Incentive Plan, as amended from time to time.

1.18 **IC Plan** means the PPG Industries, Inc. Incentive Compensation Plan for Key Employees, as amended from time to time and formerly known as the PPG Industries, Inc. Incentive Compensation and Deferred Income Plan for Key Employees.

1.19 **Insider** means a Participant who at any time within the prior six (6) months was a person subject to Section 16 of the Securities Act of 1934.

1.20 **Investment Account** means, for any Participant, one or more recordkeeping accounts the value of which is based on or derived from such investment funds, money market accounts or other investment vehicles as determined by the Committee from time to time and pursuant to which such Participant makes elections pursuant to Section III hereof.

1.21 **Investment Account Share** means a recordkeeping unit for the appropriate Investment Account, in each case, equal in value to one share or other ownership unit of the investment fund, money market account or other investment vehicle upon which the value of the particular Investment Account is based.

1.22 **Key Employee** has the meaning assigned to that term under Section 416(i) of the Code (determined without regard to subsection 416(i)(5) thereof). For purposes of Sections 5.02(h) and 5.03(b), a Participant who is a Key Employee for a calendar year shall be treated as a Key Employee during the 12-month period commencing on the first day of the fourth month following the last day of such calendar year.

1.23 **LTIP** means the PPG Industries, Inc. Long Term Incentive Plan, as amended from time to time.

1.24 **MAP** means the PPG Industries, Inc. Management Award and Deferred Income Plan, as amended from time to time and formerly known as the PPG Industries, Inc. Management Award and Deferred Income Plan.

1.25 **Omnibus Plan** means the PPG Industries, Inc. Omnibus Incentive Plan, as amended from time to time.

1.26 **Omnibus Plan Stock Award** means an Award (as that term is defined under the Omnibus Plan) other than an Option, Stock Appreciation Right (as those terms are

defined in the Omnibus Plan) or Short-Term Cash Incentive Award under Article X of the Omnibus Plan, whether settled in cash or in PPG Stock.

1.27 **Participant** means an Employee who is approved to participate in either the LTIP, the Executive Officers' LTIP, the IC Plan, MAP, or the Annual Plan or who is eligible to receive an Omnibus Plan Stock Award or Short-Term Cash Incentive Award under Article X of the Omnibus Plan and has made one or more deferral elections pursuant to Section II hereof.

1.28 **Payment** has the meaning assigned to that term under the LTIP or the Executive Officers' LTIP, as applicable.

1.29 **Plan** means this PPG Industries, Inc. Deferred Compensation Plan as amended and restated effective as of January 1, 2024.

1.30 **Plan Year** means any calendar year.

1.31 **PPG Stock** means, as of any date, the then issued and outstanding voting common stock of the Company. Shares of PPG Stock issued or transferred in accordance with the terms of the Plan may be either authorized but unissued shares or issued shares acquired by the Company and held in its treasury.

1.32 **PPG Stock Account** means a record-keeping account maintained for a Participant who elects to defer all or part of an Award, Salary, Payment, or Omnibus Plan Stock Award and/or to maintain all or part of a deferred Award, Salary, Payment, or Omnibus Plan Stock Award in the form of Stock Account Shares.

1.33 **PPG Stock Fund** means the PPG Stock Account or any other fund or account of any other benefit plan of the Company or a Subsidiary which account or fund is invested in, or valued based upon, PPG Stock.

1.34 **Retirement Age** means the date on which a Participant is eligible to receive a benefit from a retirement plan sponsored by the Corporation.

1.35 **Retirement Date** means the first day of the month following a Participant's termination of employment on or after such Participant's Retirement Age.

1.36 **Salary** means a Participant's monthly base salary from the Corporation (excluding bonuses, commissions and other non-regular forms of compensation) and including payments from the PPG Industries Salary Continuance Plan, before reductions for deferrals under the Plan or under any other Plan sponsored by the Corporation. In the case of Salary continuance, Salary deferral elections shall be applied to the actual amount of Salary continuance being paid. Effective January 1, 2009, any temporary reduction in a Participant's monthly base salary pursuant to the Fiber Glass business unit temporary salary reduction program shall be disregarded in determining such Participant's Salary, and such Participant's Salary shall be determined without regard to such temporary reduction.

1.37 **Savings Plan** means the PPG Industries Employee Savings Plan, as amended from time to time.

1.38 **Savings Plan Restoration Contributions** means contributions to a Participant's Account in accordance with Section 4.01.

1.39 **Stock Account Share** means a record-keeping unit which is equivalent to one share of PPG Stock.

1.40 **Subsidiary** means any corporation of which fifty percent (50%) or more of the outstanding voting stock or voting power is owned, directly or indirectly, by the Company and any partnership or other entity in which the Company has a fifty percent (50%) or more ownership interest.

1.41 **Unforeseeable Emergency** means a severe financial hardship to a Participant resulting from (i) an illness or accident of such Participant, the Participant's spouse, the Participant's Beneficiary, or the Participant's dependent (as defined in Code Section 152, without regard to subsections 152(b)(1), (b)(2) and (d)(1)(B)), (ii) loss of the Participant's property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by insurance, for example, not as a result of a natural disaster), or (iii) other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant, to the extent that such financial hardship is not or may not be relieved through reimbursement or compensation from insurance or otherwise, by liquidation of the Participant's assets (to the extent the liquidation of such assets would not cause severe financial hardship), or by cessation of deferrals of Salary, Awards or Payments.

SECTION II - DEFERRALS

2.01 Deferral of Salary

(a) Prior to the beginning of each Plan Year, a Participant may, in accordance with procedures established from time to time by the Administrator, elect to defer a percentage, in whole percentages only, of his/her Salary for services performed for such Plan Year as follows:

Minimum Deferral	Maximum Deferral
1%	50%

(b) Elections made pursuant to Section 2.01 shall remain in effect until (i) the last day of the Plan Year to which such election applies, or (ii) in the discretion of the Administrator, terminated or modified pursuant to a new election filed by a Participant in accordance with the requirements of Section 2.01(a) and Section 2.01(c). Notwithstanding the foregoing, a Participant may elect to cancel a deferral election (i) upon an Unforeseeable Emergency, or (ii) pursuant to the Participant's Disability, provided that such cancellation election is made by the later of December 31 of the Plan Year in which the Disability occurs or the 15th day of the third month following the date of the Disability.

(c) Except as provided by Section 2.05, any election filed by a Participant pursuant to Section 2.01(a), including any election to terminate or modify an election, must be received by the Administrator on or before the last business day of the Plan Year prior to the Plan Year in which such election is to become effective. Deferred Salary shall be credited to the Participant's Account on the last day of the month in which the deferral is made.

(d) The number of Stock Account Shares credited to the PPG Stock Account shall be determined by the closing price as reported on the New York Stock Exchange Composite Tape for PPG Stock on the last business day of the month in which the deferral is made.

(e) The number of Investment Account Shares credited to the appropriate Investment Account shall be determined by the closing market price for shares of the mutual fund on which the value of the Investment Account is based on the last business day of the month in which the deferral is made.

(f) Notwithstanding any other provision of this Section 2.01, a Participant may file a new deferral election with respect to Salary for services performed during the 2005 Plan Year no later than March 15, 2005 (and any such new election filed between January 1, 2005 and March 15, 2005 shall replace any election filed on or before December 31, 2004) that (i) increases the deferral of Salary earned on or after April 1, 2005, or (ii) cancels all deferral elections with respect to Salary earned from January 1, 2005 through April 15, 2005. In the event of a cancellation of a deferral election pursuant to clause (ii) above, the amount deferred prior to the filing of such election, adjusted for earning or losses, shall be paid to such

Participant as soon as practicable after the election is filed, but in no event later than December 31, 2005.

2.02 Deferral of Awards

(a) Prior to the beginning of the Plan Year, a Participant may, in accordance with procedures established from time to time by the Administrator, elect to defer a percentage, in whole percentages only and no less than 10%, of his/her Award granted for such Plan Year. Elections made pursuant to Section 2.02 shall be effective (i) with respect to Awards earned during the Plan Year to which such election applies, or (ii) in the discretion of the Administrator, with respect to Awards earned in subsequent Plan Years until terminated or modified pursuant to a new election filed by a Participant in accordance with the requirements of Section 2.02(a) and Section 2.02(b).

(b) Except as otherwise provided in Section 2.05, any election filed by a Participant pursuant to Section 2.02(a), including any election to terminate or modify an election, must be received by the Administrator on or before the last business day of the Plan Year prior to the Plan Year in which such election is to become effective. Notwithstanding the foregoing, a Participant may elect to cancel a deferral election (i) upon an Unforeseeable Emergency, or (ii) pursuant to the Participant's Disability, provided that such cancellation election is made by the later of December 31 of the Plan Year in which the Disability occurs or the 15th day of the third month following the date of Disability.

(c) Except as provided by Section 2.05, any election filed by a Participant pursuant to Section 2.02(a), including any election to terminate or modify an election, must be received by the Administrator on or before the last business day of the Plan Year prior to the Plan Year in which such election is to become effective. Notwithstanding the foregoing, a Participant may elect to cancel a deferral election (i) upon an Unforeseeable Emergency, or (ii) pursuant to the Participant's Disability, provided that such cancellation election is made by the later of December 31 of the Plan Year in which the Disability occurs or the 15th day of the third month following the date of the Disability.

(d) In accordance with the provisions of this Section 2.02, the value of:

(1) that portion of the cash component of an Award which the Participant elects to defer and has designated in accordance with Section 3.01 to the PPG Stock Account; and/or

(2) the stock component of a deferred Award

shall be credited to the PPG Stock Account in the Participant's Account on the day such deferral would otherwise have been paid to the Participant.

(e) (1) Share-based Awards credited to the PPG Stock Account shall be credited in the form of Stock Account Shares and cash Awards credited to the PPG Stock Account shall be credited in the form of whole and fractional Stock Account Shares, the number of which will be determined according to the Conversion Formula.

(2) Cash-based Awards credited to the Investment Account(s) shall be credited in the form of Investment Account Shares, the number of which will be determined according to the most recent closing market value of the appropriate Investment Account Shares as of the date credited to the Participant's Investment Account(s).

(f) Notwithstanding any other provision of this Section 2.02, at any time on or before March 15, 2005, a Participant may cancel any prior deferral election for Awards that were earned in 2004.

2.03 Deferral of Payment under the LTIP and the Executive Officers' LTIP and Deferral of Omnibus Plan Stock Award

(a) A participant who is entitled to receive a Payment under the terms of the LTIP or the Executive Officers' LTIP, or an Omnibus Plan Stock Award under the Omnibus Plan may elect to defer receipt of such Payment, or Omnibus Plan Stock Award in accordance with this Section 2.03.

(b) A Participant may elect to defer either 25%, 50%, 75% or 100% of his/her Payment or Omnibus Plan Stock Award. Any balance that is not deferred in accordance with this Section 2.03 shall be paid to the Participant as provided in the LTIP, the Executive Officers' LTIP, or the Omnibus Plan, as applicable.

(c) Except as otherwise provided in Section 2.05, all elections with respect to a Payment or Omnibus Plan Stock Award pursuant to this Section 2.03 must be filed no later than (i) if such Payment or Omnibus Plan Stock Award meets the requirements for performance-based compensation with the meaning of Treasury Regulation Section 1.409A-1(e), the last day of the year prior to the last year of the period of service with respect to which the Payment or Omnibus Plan Stock Award is made, or (ii) if such Payment or Omnibus Plan Stock Award does not meet the requirements for performance-based compensation within the meaning of Treasury Regulation Section 1.409A-1(e), the last day of the year prior to the first year of the period of service with respect to which the Payment or Omnibus Plan Stock Award is made , and, in either case, such election shall become irrevocable as of the first day of the last year of such period or the first year of such period, as applicable. Notwithstanding the foregoing, in the case of an election with respect to a Payment or Omnibus Plan Stock Award that constitutes performance-based compensation with the meaning of Treasury Regulation Section 1.409A-1(e), no election to defer a Payment or Omnibus Plan Stock Award may be made after such Payment or Omnibus Plan Stock Award becomes readily ascertainable and the Participant must be continuously employed from the later of the beginning of the performance period with respect to which the Payment or Omnibus Plan Stock Award is made or the date the performance criteria applicable to such Payment or Omnibus Plan Stock Award are established, to the date of the election under this Section 2.03.

The Administrator may, in its discretion, adopt a procedure, pursuant to which an election made by a Participant with respect to a Payment or an Omnibus Plan Stock Award will continue in effect with respect subsequent Payments or Omnibus Plan Stock Awards unless and until

modified by such Participant. In such event, any election filed by a Participant to terminate or modify an election with respect to a Payment or an Omnibus Plan Stock Award must be received by the Administrator on or before the election deadline set forth above with respect to such Payment or Omnibus Plan Stock Award.

(d) In accordance with the provisions of Sections 2.03(a), (b) and (c) above, the value of that portion of the cash component of a Payment or Omnibus Plan Stock Award which the Participant elects to defer under this Plan and has designated to one or more of the Investment Accounts in accordance with Section 3.01 shall be credited to such Investment Account(s) on the day such deferral would otherwise have been paid to the Participant.

(e) In accordance with the provisions of this Section 2.03, the value of:

(1) that portion of the cash component of a Payment or Omnibus Plan Stock Award which the Participant elects to defer and has designated in accordance with Section 3.01 to the PPG Stock Account; and/or

(2) the stock component of a deferred Payment or Omnibus Plan Stock Award

shall be credited to the PPG Stock Account in the Participant's Account on the day such deferral would otherwise have been paid to the Participant.

(f) (1) Share-based portions of Payments and Omnibus Plan Stock Awards credited to the PPG Stock Account shall be credited in the form of Stock Account Shares and cash-based portions of Payments and Omnibus Plan Stock Awards credited to the PPG Stock Account shall be credited in the form of whole and fractional Stock Account Shares, the number of which will be determined according to the Conversion Formula.

(2) Cash-based portions of Payments and Omnibus Plan Stock Awards credited to the Investment Account(s) shall be credited in the form of Investment Account Shares, the number of which will be determined according to the most recent closing market value of the appropriate Investment Account Shares as of the date credited to the Participant's Investment Account(s).

2.04 Dividend Equivalents under the LTIP, the Executive Officers' LTIP or the Omnibus Plan

(a) Dividend Equivalents credited to a Participant in accordance with the LTIP, the Executive Officers' LTIP or, with respect to Omnibus Plan Stock Awards, the Omnibus Plan, shall be credited to such Participant's PPG Stock Account in the form of Stock Account Shares or to such Participant's Other Investment Account(s), as designated by the Participant in accordance with Section 3.01.

(b) The number of Stock Account Shares, if any, credited to the PPG Stock Account pursuant to Section 2.04(a) above shall be determined on the basis of the closing price as reported on the New York Stock Exchange

Composite Tape of PPG Stock for the day on which the corresponding dividend is paid on PPG Stock.

(c) Dividend Equivalents credited to the Investment Account(s) shall be credited in the form of Investment Account Shares in the same manner as cash Awards are credited to Investment Account(s).

2.05 New Participants

(a) Notwithstanding any other provision of this Plan to the contrary, in the case of the first year a Participant becomes eligible to participate in the Plan, such Participant's election to defer Salary, may be made within thirty days after the date the Participant becomes eligible to participate in the Plan. Such election shall be effective the first day of the month following such thirty day period.

(b) If a Participant first becomes eligible to participate in the Plan prior to June 1 of a calendar year, such Participant may file an election to defer an Award or a Payment for such year no later than June 30 of such year provided that such Award or Payment constitutes performance-based compensation within the meaning of Treasury Regulation Section 1.409A-1(e) (or any successor regulation) and, otherwise, shall not be permitted to file an election to defer such an Award or Payment.

(c) If a Participant first becomes eligible to participate in the plan on or after June 1 of a calendar year, such Participant may not file an election to defer an Award or a Payment for such year. For purposes of this Section 2.05, the date on which a Participant first becomes eligible to participate in the Plan is the date on which such Participant is notified of his or her eligibility.

2.06 Vesting

(a) All amounts credited to a Participant's Account shall be 100% vested at all times, except to the extent provided in Section 5.03(c).

SECTION III - INVESTMENT OPTIONS

3.01 Investment Election

(a) Participants must file an election with the Administrator designating the investment election for any cash amounts or Dividend Equivalents from the LTIP, the Executive Officers' LTIP or the Omnibus Plan being credited to the Plan, the deferred cash portion of any Award, and deferred Salary. If a Participant does not provide an investment election to the Administrator in accordance with this Section 3.01, such Participant shall be deemed to have filed an election to have elected all amounts to be deemed invested in such Investment Account as the Committee shall determine from time to time.

(b) Any election filed by a Participant under Section 3.01(a) above shall remain in effect unless and until the Participant files a new election with the Administrator.

(c) Elections filed in accordance with this Section 3.01 must be filed in accordance with the procedure established by the Administrator.

(d) An Insider may not elect to have any portion of his or her Account invested in the PPG Stock Fund

3.02 Investment Accounts

Amounts credited to the Investment Accounts shall be credited in the form of whole and fractional Investment Account Shares.

3.03 PPG Stock Account

(a) Amounts credited to the PPG Stock Account shall be credited in the form of whole and fractional Stock Account Shares.

(b) Participants shall not receive cash dividends or have voting or other shareholders' rights as to Stock Account Shares; however, Stock Account Shares shall accrue whole and fractional dividend equivalents, in the form of additional Stock Account Shares, on the basis of the closing price as reported on the New York Stock Exchange Composite Tape for PPG Stock for the day on which the dividend with respect to which such dividend equivalent is credited is paid, based on the number of whole and fractional Stock Account Shares in the PPG Stock Account on the record date.

3.04 Transfers

(a) Subject to paragraph (b) below, a Participant who has a balance in the Investment Accounts may elect to transfer any amounts between/among the Investment Accounts or into the PPG Stock Account. Such transfers shall be subject to the following:

(1) Participants must file a transfer request with the Administrator in accordance with the procedure established by the Administrator.

(2) (A) For transfers into the PPG Stock Account, the number and value of whole and fractional Stock Account Shares shall be determined by the closing price as reported on the New York Stock Exchange Composite Tape of PPG Stock on the last business day of the month in which the election is received by the Administrator.

(B) For transfers into and out of any of the Investment Accounts, the number and value of whole and fractional Investment Account Shares shall be determined by the closing price of the appropriate Investment Account Share on the date of such transfer.

(3) No transfers may be made out of the PPG Stock Account at any time.

(b) Insiders are prohibited from making any transfer into the PPG Stock Fund.

SECTION IV - RESTORATION CONTRIBUTIONS

4.01 Savings Plan Restoration Contributions

(a) Savings Plan Restoration Contributions will be credited to the accounts of Participants in the manner set forth in Section 4.01(b). The amount with respect to which Stock Account Shares are credited to a Participant's PPG Stock Account for a month pursuant to Section 4.01(b) shall be an amount equal to the difference between (1) and (2) below, but no greater than the amount of such Participant's deferred Salary under this Plan for such month:

(1) The amount of Company matching contributions that would have been credited to such Participant's account under the Savings Plan for such month (i) without regard to the limitations of Section 401(a)(17) of the Code, (ii) by including the Participant's Salary deferral amounts pursuant to Section 2.01 of this Plan in the determination of such Participant's eligible earnings for such month, and (iii) had the Participant made Savings and/or Elective Deferral contributions (as those terms are defined in the Savings Plan) to the Savings Plan in the amounts necessary to receive the maximum matching contributions under the Savings Plan for such month.

(2) The amount of Company matching contributions that would have been actually credited to such Participant's account under the Savings Plan for such month had such Participant made Savings and/or Elective Deferral contributions to the Savings Plan in the amounts necessary to receive the maximum matching contributions under the Savings Plan for such month.

(b) Savings Plan Restoration Contributions for a month shall be credited to the Participant's PPG Stock Account in the form of Stock Account Shares at the same time as the associated matching contributions for such month under the Savings Plan are contributed to the Savings Plan. The number of whole and fractional Stock Account Shares shall be determined by using the closing price as reported on the New York Stock Exchange Composite Tape for PPG Stock on the last business day of the month in which such Restoration Contributions are made, and shall be credited to the Participant's Account as of such day.

(c) Savings Plan Restoration Contributions may not be transferred from the PPG Stock Account.

(d) If a Participant's Eligible Monthly Salary (as that term is defined in the Savings Plan) for any month during 2020 was reduced by reason of the Corporation's temporary salary reduction program, the amount of Savings Plan Restoration Contributions for such Participant for such month shall be determined by treating such Participant as if his or her Eligible Monthly Salary for such month was the amount of the Participant's Eligible Monthly Salary for the month immediately prior to such reduction.

4.02 Defined Contribution Retirement Plan Restoration Contributions

(a) Effective January 1, 2006, Defined Contribution Retirement Plan Restoration Contributions will be credited to the Accounts of Participants on an annual basis after the end of each Plan Year. The amount credited to a Participant's Account for a Plan Year shall be an amount equal to the difference between (1) and (2) below:

(1) The amount of employer contributions that would have been credited to such Participant's account under the PPG Industries, Inc. Defined Contribution Retirement Plan for such Plan Year determined (A) without regard to the limitations of Sections 401(a)(17) and 415 of the Code, and (B) by including bonus awards under the terms of the PPG Industries, Inc. Management Award Plan, Incentive Compensation Bonuses, Executive Officers Incentive Compensation and other compensation amounts to the extent otherwise excluded from the definition of "Eligible Compensation" under the PPG Industries, Inc. Defined Contribution Retirement Plan for purposes of determining allocations thereunder for such Plan Year.

(2) The amount of employer contributions actually credited to such Participant's account under the PPG Industries, Inc. Defined Contribution Retirement Plan for such Plan Year.

(b) Defined Contribution Plan Restoration Contributions shall be credited to the Investment Accounts in the same manner as cash amounts invested pursuant to Section 3.

(c) If a Participant's Eligible Compensation (as that term is defined in the Savings Plan) for any month during 2020 was reduced by reason of the Corporation's temporary salary reduction program, the amount of Defined Contribution Plan Restoration Contributions for such Participant for the 2020 calendar year shall be determined by treating such Participant as if his or Eligible Compensation for each such month was the amount of the Participant's Eligible Compensation for the month immediately prior to such reduction.

SECTION V - WITHDRAWAL PROVISIONS

5.01 Scheduled In-Service Withdrawals

(a) Except as otherwise provided in this Section V, payment of any amount designated by a Participant for in-service withdrawal, in accordance with the provisions of Section 5.01(b) below, shall be made to the Participant in a lump sum as of the first day of the quarter/year specified by the Participant.

(b) A Participant may designate for in-service withdrawal the cash portion of an Award that the Participant has elected to defer pursuant to Section 2.02 as follows:

(1) At the time an election is made to defer all or a portion of the cash component of an Award pursuant to Section 2.02, a Participant may designate all or a portion of the cash component of such deferred amount, including any earnings thereon, to be paid on the first day of a specified quarter/year. Effective with respect to Awards granted and earned after December 31, 2023, a Participant may designate all of the cash portion of such deferred amount, including any earnings thereon, to be paid on the first day of a specified quarter/year and a Participant shall not be entitled to designate only a portion of such amount for in-service withdrawal.

(2) Withdrawal elections made pursuant to this Section 5.01 may not specify a year which is any sooner than the fourth Plan Year after the Plan Year in which the deferred amount is credited to the Participant's Account.

(3) Any amount subject to withdrawal pursuant to this Section 5.01 must be invested in the Investment Account. Effective January 1, 2024, the immediately preceding sentence shall apply only to Insiders.

(4) Any election made in accordance with this subsection 5.01(b) shall be irrevocable.

(c) An election under this Section 5.01 shall become null and void upon the payment or commencement of payment of benefits under Section 5.02, 5.03, 5.04 or 5.05.

5.02 Withdrawals at/after a Participant's Retirement Date

(a) In the event of a Participant's termination of employment on or after the date of such Participant's Retirement Age, such Participant's Account shall be paid in accordance with this Section 5.02.

(b) A Participant may elect a payment schedule applicable to his/her Account provided such election is filed with the Administrator at the time the Participant files his or her initial deferral election pursuant to Section 2.01, 2.02 or 2.03 of the Plan. Notwithstanding the foregoing, each Participant

in the Plan who was an active Participant in the Plan on January 1, 2005, must file such election no later than June 30, 2005.

(c) Participants may elect:

(1) One lump-sum payment; or

(2) Quarterly or annual installments - to be made over a period of years, up to a maximum period of 15 years.

(d) Subject to the provisions of this paragraph (d), a Participant may delay the first payment for a period up to five years following his/her Retirement Date; provided, however, that, in all cases, payments must begin no later than the year in which the Participant's 75th birthday occurs for Participants who retire prior to their 75th birthday; or no later than the Participant's Retirement Date for Participants who retire on or after their 75th birthday. Any election pursuant to this Section 5.02(d) shall be filed with and at the time of the election described in Section 5.02(b).

(e) The payment schedule elected by the Participant shall apply to his/her entire Account, except as provided in subsection (j) below. Participants may designate the first day of the quarter for the commencement of the payment schedule on an annual or quarterly basis.

Each installment payment shall be calculated by dividing the Participant's then current Account balance by the remaining number of installments (e.g.: Ten annual installments shall be paid: 1st installment = 1/10 of Account balance at time of payment; 2nd installment = 1/9 of Account balance at time of payment; 3rd installment = 1/8 of Account balance at time of payment, etc.). If the installment payment is to be in the form of PPG Stock, such distribution shall be made in whole shares and cash equal to any fractional share.

(f) In the event a Participant fails to file a payment schedule election with the Administrator at the time described in Section 5.02(b), his/her Account shall be paid in one lump sum on the later of (i) the first day of the first quarter of a Plan Year that is six months and ten days following such Retirement Date or (ii) January 1 of the year following such Retirement Date.

(g) A Participant who has filed a payment election in accordance with this Section 5.02 may, at any time thereafter, file a subsequent election that specifies another form or time of payout, provided that:

(1) Any subsequent election filed less than 12 months prior to the date on which payment of the Participant's Account would otherwise have commenced or been made shall be disregarded, null and void;

(2) The date on which payment of the Participant's Account will be made or commence under such subsequent election must be (i) at least five years later than the date on which such payment would otherwise have been made under such Participant's original election, and (ii) no later than ten years following his/her

Retirement Date; provided, however, that in all cases, payments must begin no later than the year in which the Participant's 75th birthday occurs for Participants who retire prior to their 75th birthday, or no later than the Participant's Retirement Date for Participant's who retire on or after their 75th birthday;

(3) The form and time of payment elected under such subsequent election may not cause any payment to be paid sooner than such payment would otherwise have been paid under such Participant's original election; and

(4) The form of payment must be one permitted under 5.02(c).

For purposes of this Section 5.02(g), an installment form of payment shall be treated as one payment. Accordingly, a Participant may elect to change his or her payment election from an installment form to a lump sum provided that such election is filed at least 12 months prior to the date on which such installment payments are scheduled to commence and provided that the lump sum is paid no earlier than the fifth anniversary of the date on which such installments were scheduled to commence.

(h) Notwithstanding any other provision of this Section 5.02, no amount shall be payable under this Section 5.02 earlier than (i) in the case of a Participant who is a Key Employee, the first day of the seventh month following the date of such Key Employee's Separation from Service with the Corporation (as that term is defined in Section 409A of the Code and the regulations thereunder), and (ii) in the case of a Participant who is a non-Key Employee, the date of such non-Key Employee's Separation from Service with the Corporation. In the event the provisions of this Section 5.02 would otherwise require that a payment be made to a Participant prior to the date specified in clause (i) or (ii) above, as applicable, such payment shall be postponed and made on the date specified in clause (i) or (ii), as applicable.

(i) Notwithstanding any other provision of this Section 5.02 (other than subsection (j) below), all amounts credited to the Account of a Participant that are attributable to Defined Contribution Retirement Plan Restoration Contributions credited pursuant to Section 4.02(a) and investments credits thereon pursuant to Section 4.02(b) shall be paid in a lump sum on the date that is the later of (i) the first day of the first quarter of a Plan Year that is six months and 10 days following such Participant's Retirement Date or (ii) January 1 of the year following such Retirement Date.

(j) Notwithstanding any other provision of this Section 5.02, if, at the time the Participant's payments commence under this Section 5.02, the Participant's Account balance is $2,000 or less, such Participant's Account shall be paid in a lump sum on such date and the Participant's form of payment election shall be disregarded, null and void.

5.03 Withdrawals Following Termination

(a) In the event of a Participant's termination of employment prior to the Participant's Retirement Age, such Participant's Account shall be paid in a lump sum on the date that is the later of (i) the first day of the first quarter of a Plan Year that is six

months and 10 days following such termination of employment or (ii) January 1 of the year following such termination of employment.

(b) Notwithstanding any other provision of this Section 5.03, no amount shall be payable under this Section 5.03 earlier than (i) in the case of a Participant who is a Key Employee, the first day of the seventh month following the date of such Key Employee's Separation from Service with the Corporation (as that term is defined in Section 409A of the Code), and (ii) in the case of a Participant who is a non-Key Employee, the date of such non-Key Employee's Separation from Service with the Corporation. In the event the provisions of this Section 5.03 would otherwise require that a payment be made to a Participant prior to the date specified in clause (i) or (ii) above, as applicable, such payment shall be postponed and made on the date specified in clause (i) or (ii), as applicable.

(c) Notwithstanding any other provision of the Plan, the portion of a Participant's Account that is attributable to Defined Contribution Retirement Plan Restoration Contributions (including any earnings and losses thereon) shall be paid to a Participant pursuant to this Section 5.03 only if, at the time of such Participant's termination of employment, such Participant is a Vested Participant as that term is defined under the PPG Industries, Inc. Defined Contribution Retirement Plan. The Account of a Participant who is not a Vested Participant shall be forfeited at the same time as such Participant's account under the PPG Industries, Inc. Defined Contribution Retirement Plan is forfeited. If such Participant is later rehired, such Participant's Account shall be restored to the same extent that such Participant's account under the PPG Industries, Inc. Defined Contribution Retirement Plan is restored.

5.04 Withdrawals in the event of Disability

(a) In the event a Participant's Disability, such Participant's Account shall be paid in a lump sum on the date that is the later of (i) the first day of the first quarter of a Plan Year that is six months and 10 days following the date on which such Participant is determined to be Disabled, or (ii) January 1 of the year following the year in which such Participant is determined to be Disabled.

5.05 Withdrawals Following a Participant's Death

(a) In the event of a Participant's death, the Participant's entire Account shall be paid to the Participant's Beneficiary in a lump sum as soon as practicable following the Participant's death.

5.06 Withdrawals upon finding of Unforeseeable Emergency

(a) Upon a finding that the Participant has suffered an Unforeseeable Emergency, the Administrator may, in his sole discretion, permit the acceleration of a withdrawal under the Plan in an amount reasonably necessary to alleviate the financial hardship giving rise to such Unforeseeable Emergency.

(b) The amount paid to a participant pursuant to this Section 5.06 shall not exceed the amount necessary to satisfy such emergency plus amounts

reasonably necessary to pay any federal, state, local or foreign taxes reasonably anticipated as a result of such payment.

(c) Notwithstanding the foregoing, no amount attributable to a Participant's Defined Contribution Retirement Plan Restoration Contributions (including investment credits pursuant to Section 4.02(b)) shall be available for withdrawal pursuant to this Section 5.06.

5.07 Methods of Payment

(a) PPG Stock Account

Any payment from the PPG Stock Account shall be paid in the form of PPG Stock.

At the time of the final scheduled payment, payments from the PPG Stock Account with respect to remaining fractional shares of PPG Stock shall be converted to and paid in cash.

(b) Investment Accounts

Payments from the Investment Accounts shall be made in cash. The value shall be determined using the value of the closing price of the appropriate Investment Account Shares on the last business day of the month preceding the month in which the distribution is made.

(c) All payments to Participants, or their Beneficiaries, shall be made on the first business day of a calendar quarter or as soon as reasonably practicable thereafter.

5.08 Termination of Employment in 2005

Notwithstanding any other provision of this Plan, if a Participant terminates employment in 2005, all amounts credited to the Account of such Participant shall be paid in a single lump sum cash payment as soon as practicable on or after such termination of employment but no later than December 31, 2005, provided that a Participant who has filed an election under Section 5.02(c) may, in the event of such Participant's termination of employment on or before December 31, 2005, and on or after such Participant's Retirement Age, elect to receive payment in accordance with such election in lieu of the payment described in this Section 5.08.

5.09 Payment Delays

Notwithstanding any other provision of this Plan, any payment to a Participant hereunder may, in the discretion of the Administrator, be delayed where (i) the Company reasonably anticipates that the Company's deduction with respect to such payment would not be permitted due to the application of Section 162(m) of the Code, provided that the payment is made either during the Participant's first taxable year in which the Company reasonably anticipates, or should reasonably anticipate, that if the payment is made during such year, the deduction of such payment will not be barred by application of Section 162(m) of the Code or during the period beginning with the date of the Participant's Separation from Service (within the meaning of Section 409A of the Code and the regulations

thereunder) and ending on the later of the last day of the taxable year of the Company in which the Participant Separates from Service or the 15th day of the third month following the Participant's Separation from Service and provided, further, that all such payments that could be delayed in accordance with this clause (i) are also so delayed, or (ii) the Company reasonably anticipates that the making of the payment will violate federal securities laws or other applicable law (in which case, such payment shall be made at the earliest date at which the Company reasonably anticipates that the making of the payment will not cause such violation), or (iii) the making of the payment on the date otherwise provided would jeopardize the ability of the Company to continue as a going concern, provided that payment is made during the first taxable year of the Participant in which the making of the payment would not have such effect.

SECTION VI - SPECIFIC PROVISIONS RELATED TO BENEFITS

6.01 Nonassignability

(a) Except as provided in paragraph (b) below and in Section 6.02, no person shall have any power to encumber, sell, alienate, or otherwise dispose of his/her interest under the Plan prior to actual payment to and receipt thereof by such person; nor shall the Administrator recognize any assignment in derogation of the foregoing. No interest hereunder of any person shall be subject to attachment, execution, garnishment or any other legal, equitable, or other process.

(b) Section 6.01(a) above shall not apply to the extent that a Participant's interest under the Plan is alienated pursuant to a "Qualified Domestic Relations Order" ("QDRO"), as defined in §414(p) of the Code, received by the Administrator prior to January 1, 2011.

(1) The Administrator is authorized to adopt such procedural and substantive rules and to take such procedural and substantive actions as the Administrator may deem necessary or advisable to provide for the payment of amounts from the Plan to an Alternate Payee as provided in a QDRO. Such rules and actions shall be consistent with the principal purposes of the Plan.

(2) Under no circumstances may the Administrator accept an order as a QDRO following a Participant's death.

(3) An Alternate Payee may not establish an account in the Plan. All amounts taken from a Participant's Account, as provided in a QDRO, must be distributed as soon as possible following the acceptance of an order as a QDRO.

6.02 Beneficiary Designation

(a) The Participant shall have the right, at any time and from time to time, to designate any person(s) as Beneficiary. The designation of a Beneficiary shall be effective on the date it is received by the Administrator, provided the Participant is alive on such date.

(b) Each time a Participant submits a new Beneficiary designation form to the Administrator, such designation shall cancel all prior designations.

(c) In the case of a Participant who does not have a valid Beneficiary designation on file at the time of his/her death, or in the case the designated Beneficiary predeceases the Participant, the entire balance in the Participant's Account shall be paid as soon as possible to the Participant's estate.

(d) Any Beneficiary designation with respect to a Participant in effect under the Prior Plan, shall remain in effect under this Plan, until a new Beneficiary designation form is filed in accordance with this Section 6.02.

6.03 Limited Right to Assets of the Company

The Benefits paid under the Plan shall be paid from the general funds of the Company, and the Participants and any Beneficiary shall be no more than unsecured general creditors of the Company with no special or prior right to any assets of the Company for payment of any obligations hereunder.

6.04 Protective Provisions

The Participant or Beneficiary shall cooperate with the Administrator by furnishing any and all information requested by the Administrator in order to facilitate the payment of benefits hereunder. If a Participant refuses to cooperate, he/she may be deemed ineligible to receive a distribution and/or ineligible to continue to actively participate in the Plan.

6.05 Withholding

The Participant or Beneficiary shall make appropriate arrangements with the Administrator for satisfaction of any federal, state or local income tax withholding requirements and Social Security or other employee tax requirements applicable to the payment of benefits under the Plan. If no other arrangements are made, the Administrator may provide for such withholding and tax payments by any means he deems appropriate, in his sole discretion.

6.06 Forfeiture Provision

(a) In the event the Company becomes aware that a Participant is engaged or employed as a business owner, employee, or consultant in any activity which is in competition with any line of business of the Corporation, or has engaged in any activity otherwise determined to be detrimental to the Company, the Administrative Subcommittee may apply any diminution or forfeiture of benefits, which is specifically approved by the Administrative Subcommittee.

For purposes of this Section 6.06, the Administrative Subcommittee shall consist of the senior human resources officer of the Company, PPG's Director of Payroll and Benefits, and a representative of the Law Department, as appointed by the PPG's General Counsel, or, if not so appointed, PPG's General Counsel. The Administrative Subcommittee shall report all of its activities to the Committee.

(b) LTIP and Executive Officers' LTIP

A Participant may forfeit any or all deferrals of Payments to which the Participant is entitled under the terms of the LTIP or Executive Officers' LTIP held in his/her Account if the Committee determines that such forfeiture shall occur in accordance with Section 4.04 of the LTIP or Executive Officers' LTIP, as applicable.

SECTION VII - ADMINISTRATION AND CLAIMS

7.01 Administration

(a) The Administrator shall administer the Plan and interpret, construe and apply its provisions in accordance with its terms. The Administrator shall have the complete authority to:

(1) Determine eligibility for benefits;

(2) Construe the terms of the Plan; and

(3) Control and manage the operation of the Plan.

(b) The Administrator shall have the authority to establish rules for the administration and interpretation of the Plan and the transaction of its business. The determination of the Administrator as to any disputed question shall be conclusive.

(c) The Administrator may employ counsel and other agents and may procure such clerical, accounting and other services as the Administrator may require in carrying out the provisions of the Plan.

(d) The Administrator shall not receive any compensation from the Plan for his services.

(e) The Company shall indemnify and save harmless the Administrator against all expenses and liabilities arising out of the Administrator's service as such, excepting only expenses and liabilities arising from the Administrator's own gross negligence or willful misconduct, as determined by the Committee.

7.02 Claims

(a) General

Every person receiving or claiming benefits under the Plan shall be conclusively presumed to be mentally and physically competent and of age. If the Administrator determines that such person is mentally or physically incompetent or is a minor, payment shall be made to the legally appointed guardian, conservator, or other person who has been appointed by a court of competent jurisdiction to care for the estate of such person, provided that proper proof of such appointment is furnished in a form and manner suitable to the Administrator. Any payment made under the provisions of this Section 7.02(a) shall be a complete discharge of any liability therefore under the Plan. The Administrator shall not be required to see to the proper application of any such payment.

(b) Non-Disability Claims

Except as provided in Section 7.02(c) below, all claims for benefits under the Plan shall be submitted to, and within 90 days thereafter decided by, in writing, the person designated by the Company (the "Claims Reviewer")

acting directly or through such employees of the Company as the Claims Reviewer shall designate. If the Claims Reviewer determines that an extension of time for processing the claim is required, the Claims Reviewer may extend the date by which a decision is required to 180 days after the claim is submitted provided that the Claims Reviewer provides written notice of the extension to the claimant prior to the termination of the initial 90-day period, including the special circumstances requiring an extension of time and the date by which the Claims Reviewer expects to render a decision.

(c) Disability Claims

All claims for benefits under the Plan that are based upon the Participant's Disability (each a "Disability Claim") shall be submitted to, and within 45 days thereafter decided in writing by, the Claims Reviewer acting directly or through such employees of the Company as the Claims Reviewer shall designate. If the Claims Reviewer determines that an extension of time for processing the Disability Claim is required, the Claims Reviewer may extend the date by which a decision is required to 75 days after the Disability Claim is submitted, provided that the Claims Reviewer provides written notice of the extension to the claimant prior to the termination of the initial 45-day period, including the special circumstances requiring an extension of time and the date by which the Claims Reviewer expects to render a decision. If the Claims Reviewer determines that, due to matters beyond the control of the Plan, a decision on a Disability Claim cannot be rendered within 75 days after the Disability Claim is submitted, the Claims Reviewer may extend the date by which a decision is required to 105 days after the Disability Claim is filed, provided that the Claims Reviewer notifies the claimant, prior to expiration of the 75-day period, of the circumstances requiring the extension and the date as of which the Plan expects to render a decision. In the case of any extension of the 45-day or 75-day review period, the notice of extension shall specifically explain the standards on which entitlement to a benefit is based, the unresolved issues that prevent a decision on the Disability Claim, and the additional information needed to resolve those issues, and the claimant shall be afforded at least 45 days within which to provide the specified information.

(d) Information Provided Upon Denial of Claim (Including Disability Claims)

Written notice of the decision on each claim (including any Disability Claim) shall be furnished reasonably promptly to the claimant. If the claim is wholly or partially denied, such written notice shall set forth (i) the specific reason or reasons for the denial, (ii) reference to the specific Plan provisions on which the denial is based, (iii) a description of any additional material or information necessary for the claimant to perfect the claim and an explanation of why such material or information is necessary, (iv) a description of the Plan's review procedures and the time limits applicable to such procedures, including a statement of the claimant's right to bring a civil action under Section 502(a) of ERISA, as amended, following the denial of a claim on review, (v) in the case of a denial of a Disability Claim, if an internal rule, guideline, protocol, or other criterion was relied upon in making the adverse determination, either the specific rule, guideline, protocol, or other similar criterion or a

statement that such a rule, guideline, protocol, or other similar criterion was relied upon in denying the claim and that a copy of such rule, guideline, protocol, or other criterion will be provided free of charge to the claimant upon request.

(e) Review of Denial of Non-Disability Claim

Except as provided in Section 7.02(f) below, a claimant may request a review by the Claims Reviewer of a decision denying a claim in writing within 60 days following receipt of the denial. All such reviews shall be decided in writing by the Claims Reviewer within 60 days after receipt of the request for review. If the Claims Reviewer determines that an extension of time for processing the review is required, the Claims Reviewer may extend the date by which a decision is required to 120 days after the request for review is submitted provided that the Claims Reviewer provides written notice of the extension to the claimant prior to the termination of the initial 60-day period, including the special circumstances requiring an extension of time and the date by which the Claims Reviewer expects to render a decision.

(f) Review of Denial of Disability Claim

A claimant may request a review by the person designated by the Company as responsible for reviews of denied Disability Claims, which such person shall be neither the Claims Reviewer nor a person subordinate to the Claims Reviewer (the "Disability Appeals Reviewer") of a decision denying a Disability Claim in writing within 180 days following receipt of the denial. All such reviews shall be decided in writing by the Disability Appeals Reviewer within 45 days after receipt of the request for review. If the Disability Appeals Reviewer determines that an extension of time for processing the review is required, the Disability Appeals Reviewer may extend the date by which a decision is required to 90 days after the request for review is submitted provided that the Disability Appeals Reviewer provides written notice of the extension to the claimant prior to the termination of the initial 45-day period, including the special circumstances requiring an extension of time and the date by which the Disability Appeals Reviewer expects to render a decision. If the Disability Appeals Reviewer cannot reach a decision about a claimant's request for review because the claimant has not submitted information requested by the Disability Appeals Reviewer, the 45-day period (or 45-day extension if applicable) shall be tolled until the date on which the claimant responds to the request for additional information. The Disability Appeals Reviewer may delegate its duty to review denied Disability Claims hereunder provided that the person or entity to whom such duty is delegated shall not be the Claims Reviewer or a subordinate of the Claims Reviewer. Any review of a denied Disability Claim hereunder shall be without deference to the Claims Reviewer's denial of the Disability Claim.

(g) Review Procedures for All Claims

In connection with a review of a denied claim for benefits (including a Disability Claim), a claimant shall (i) have the opportunity to submit written comments, documents, records, and other information relating to the claim for benefits, and (ii) be provided, upon request and free of

charge, reasonable access to, and copies of all documents, records, and other information relevant to the claimant's claim for benefits. The review of a denied claim shall take into account all comments, documents, records, and other information submitted by the claimant related to the claim, without regard to whether such information was submitted or considered in the initial review of the claim. If a claim is denied upon review, the written notice of the denial shall specify (i) the specific reason or reasons for the denial, (ii) reference to the specific Plan provisions upon which the denial is based, and (iii) a statement that the claimant is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to the claimant's claim for benefits.

(h) Additional Review Procedures for Disability Claims

If the denial of a Disability Claim upon review is based in whole or in part on a medical judgment the Disability Appeals Reviewer or its delegate shall consult with a health care professional who has appropriate training and experience in the field of medicine involved in the medical judgment. Such professional shall be an individual who is neither an individual who was consulted in connection with the initial denial of the Disability Claim nor the subordinate of any such individual. The Disability Appeals Reviewer or its delegate shall provide for the identification of medical or vocational experts whose advice was obtained on behalf of the Plan in connection with a denied Disability Claim without regard as to whether the advice was relied upon in making the benefit determination. If an internal rule, guideline or protocol, or other similar criterion was relied upon in denying a Disability Claim upon review, the notice denying such claim upon review shall set forth either the specific rule, guideline, protocol, or other similar criterion, or a statement that such rule, guideline, protocol, or other criterion was relied upon in denying the claim and that a copy of the rule, guideline, protocol, or other similar criterion will be provided free of charge to the claimant upon request. Any notice denying a Disability Claim upon review shall contain the following statement: "You and your plan may have other voluntary alternative dispute resolution options, such as mediation. One way to find out what may be available is to contact your local U.S. Department of Labor Office and your State insurance regulatory agency."

(i) Authorized Representative

The claimant may have an authorized representative to act on the claimant's behalf in pursuing a benefit claim or appeal of the denial of the benefit. In order for a representative to be recognized as acting on behalf of the claimant, the claimant must provide in writing to the Administrator the name, address and phone number of his authorized representative and a statement that the representative is authorized to act in his behalf concerning his claim for benefit, and if applicable, an appeal of the denial of the benefit.

SECTION VIII - AMENDMENT AND TERMINATION

8.01 Amendment of the Plan

Except as provided in Section X, the Board or the Committee may amend the Plan, in whole or in part, at any time; however, no such amendment may decrease the amount of benefit currently accrued in Participants' Accounts.

Except as provided in Section X, the Administrator shall have the authority to adopt amendments to the Plan, in whole or in part, at any time, necessary for the implementation and/or administration of the Plan, which will not result in a material change to the Plan. Moreover, no such amendment by the Administrator may increase or decrease the amount of benefit currently accrued in Participants' Accounts.

8.02 Plan Freeze

The Committee may freeze the Plan at any time. Upon a Plan freeze pursuant to this Section 8.02, no further deferrals of Salary, Awards, Payments under the LTIP or the Executive Officers' LTIP or Omnibus Plan Stock Awards under the Omnibus Plan shall be permitted.

8.03 Premature Income Inclusion

In the event the Administrator determines that amounts deferred under the Plan are includable in income pursuant to Section 409A of the Code, distributions shall be made to Participants, as determined by the Administrator up to an amount not to exceed the amount included in the Participant's income under Section 409A of the Code. The determination of the Administrator under this Section 8.03 shall be binding and conclusive.

8.04 Termination

Except as provided in Section X, the Committee may, in its discretion, terminate the Plan under any one of the following circumstances:

(a) At any time, provided that all nonqualified deferred compensation arrangements sponsored by the Company and any company required to be aggregated with the Company under Section 414(b) and (c) of the Code that are treated, together with the Plan, as one arrangement under Section 409A of the Code, provided that (i) the termination does not occur proximate to a downturn in the financial health of the Company, (ii) no payments other than payments that would be payable under the terms of the Plan and such other arrangements if the termination had not occurred are made within 12 months of the termination of the Plan and such other arrangements, (ii) all such payments are made within 24 months of the termination of the Plan and such other arrangements, (iii) neither the Company nor any company required to be aggregated with the Company under Section 414(b) or (c) of the Code adopts a new arrangement that would, with the Plan or any such other terminated arrangement, be treated as a single arrangement under Section 409A of the Code, at any time within three years following the date of termination of the Plan and such other arrangements.

(b) At any time during the period beginning 30 days preceding and ending 12 months following a change in control event (as that term is defined in Treasury Regulation Section 1.409A-3(i)(5) (or any successor regulation)), provided that (i) all substantially similar arrangements sponsored by the Company and any company required to be aggregated with the Company under Sections 414(b) or (c) of the Code are terminated and (ii) all participants under the Plan and such other arrangements are required to receive all amounts of compensation deferred under the Plan and such other arrangements within 12 months of the date of termination of the Plan and such other arrangements.

(c) At any time within 12 months of a dissolution of the Company taxed under Section 331 of the Code, or with the approval of a bankruptcy court pursuant to 11 U.S.C. Section 503(b)(1)(A), provided that the amounts deferred under the Plan are included in Participants' gross incomes in the latest of (i) the calendar year in which the termination occurs, (ii) the first calendar year in which the payment is administratively practicable, or (iii) the first calendar year in which such amounts are vested, or, if earlier, the calendar year in which the amounts are constructively received.

SECTION IX - MISCELLANEOUS

9.01 Successors of the Company

The rights and obligations of the Company under the Plan shall inure to the benefit of, and shall be binding upon, the successors and assigns of the Company.

9.02 ERISA Plan

The Plan is intended to be an unfunded plan maintained primarily to provide deferred compensation benefits for "a select group of management or highly compensated employees" within the meaning of Sections 201, 301 and 401 of ERISA and therefore to be exempt from Parts 2, 3 and 4 of Title I of ERISA.

9.03 Trust

The Company shall be responsible for the payment of all benefits under the Plan. Except as otherwise required by Section X, the Company, at its discretion, may establish one or more grantor trusts for the purpose of providing for payment of benefits under the Plan. Such trust(s) may be irrevocable, but the assets thereof shall be subject to the claims of the Company's creditors. Benefits paid to the Participant from any such trust shall be considered paid by the Company for purposes of meeting the obligations of the Company under the Plan.

9.04 Employment Not Guaranteed

Nothing contained in the Plan nor any action taken hereunder shall be construed as a contract of employment or as giving any Participant any right to continued employment with the Corporation.

9.05 Gender, Singular and Plural

All pronouns and variations thereof shall be deemed to refer to the masculine, feminine, or neuter, as the identity of the person(s) requires. As the context may require, the singular may be read as the plural and the plural as the singular.

9.06 Headings

The headings of the Sections, subsections and paragraphs of the Plan are for convenience only and shall not control or affect the meaning or construction of any of its provisions.

9.07 Validity

If any provision of the Plan is held invalid, void or unenforceable, the same shall not affect, in any respect, the validity of any other provision(s) of the Plan.

9.08 Waiver of Breach

The waiver by the Company of any breach of any provision of the Plan by a Participant or Beneficiary shall not operate or be construed as a waiver of any subsequent breach.

9.09 Applicable Law

Where applicable, the Plan is intended to conform and be governed by ERISA. In any case where ERISA does not apply, the Plan shall be governed and construed in accordance with the laws of the Commonwealth of Pennsylvania.

9.10 Notice

Any notice required or permitted to be given to the Administrator under the Plan shall be sufficient if in writing and either hand-delivered, or sent by first class mail to the principal office of the Company at One PPG Place, Pittsburgh, PA 15272, directed to the attention of the Administrator. Such notice shall be deemed given as of the date of delivery.

9.11 409A Compliance

The plan is intended to comply with the requirements applicable to nonqualified deferred compensation plans under Section 409A of the Code. Notwithstanding any other provision of this plan, the Plan shall be interpreted and administered in accordance with the requirements of Section 409A of the Code.

9.12 Adjustments Upon Changes in Capitalization

In the event of any change in the number of outstanding shares of the Company's voting common stock by reason of any stock dividend, stock split or similar change, a corresponding change shall be made in the number Stock Account Shares held in each Participant's Account. In the event of any change in the outstanding shares of the Company's voting common stock, or in the number thereof, by reason of any merger, consolidation, combination, sale of assets, exchange of shares, recapitalization, reorganization, spin-off or similar change, the Board of Directors or the Committee may make such changes in the Stock Account Shares held in each Participant's Account as the Board or the Committee may deem to be equitable. No such change, without the consent of a Participant, may adversely affect the rights of such Participant with respect to Stock Account Shares held immediately prior to any such change, and any such change shall be final, conclusive and binding on all persons, including the Company and the Participants.

SECTION X - CHANGE IN CONTROL

10.01 Payments to a Trustee

Upon, or in reasonable anticipation of, a Change in Control, as defined in Section 10.02 below, the senior human resources officer and the senior finance officer, or either of them or their successor, shall cause an amount, as they deem appropriate, to be paid to a rabbi trust on such terms as they shall deem appropriate. Such amount shall be paid in cash and shall be sufficient, at a minimum, to equal to all deferred amounts credited to the Investment Accounts, and the PPG Stock Account. Amounts in the PPG Stock Account shall be converted to cash on the basis of the fair market value of PPG Stock on the date of the occurrence of the Change in Control, or, if higher, within 30 days of such date. Amounts in the Investment Accounts shall be converted to cash on the basis of the fair market value of the appropriate Investment Account on the date of the occurrence of the Change in Control, or, if higher, within 30 days of such date.

10.02 Definition: Change in Control

For purposes of this Section X, "Change in Control" means, and shall be deemed to have occurred upon the occurrence of, any one of the following events:

(a) The acquisition by any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) (a "Person") of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 20% or more of either (i) the then issued and outstanding shares of the Company's voting common stock ("Outstanding Common Stock") or (ii) the combined voting power of all outstanding voting securities of the Company entitled to vote generally in the election of directors to the Board of Directors of the Company ("Outstanding Voting Securities"); provided that, for purposes of this subsection (a), the following acquisitions shall not constitute a Change in Control: (i) any acquisition directly from the Company; (ii) any acquisition by the Company; (iii) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company; or (iv) any acquisition by any corporation pursuant to a transaction which complies with clauses (i), (ii) and (iii) of paragraph (c) of this Section 10.02.

(b) Individuals who, as of February 16, 2006 (the "Reference Date"), constitute the Board of Directors of the Company (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the Reference Date whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Incumbent Board; or

(c) Approval by the shareholders of the Company of a reorganization, merger or consolidation or sale or other disposition of all or substantially all of the assets of the Company (a "Business Combination"), in each case, unless, following such Business Combination:

(i) All or substantially all of the individuals and entities who were the beneficial owners, respectively, of the Outstanding Common Stock and Outstanding Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 60% of, respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors, as the case may be, of the corporation resulting from such Business Combination (including, without limitation, a corporation which as a result of such transaction owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership, immediately prior to such Business Combination of the Outstanding Common Stock and Outstanding Voting Securities, as the case may be;

(ii) No Person (excluding any employee benefit plan (or related trust) of the Company or such corporation resulting from such Business Combination) beneficially owns, directly or indirectly, 20% or more of, respectively, the then outstanding shares of common stock of the corporation resulting from such Business Combination or the combined voting power of the then outstanding voting securities of such corporation except to the extent that such ownership existed prior to the Business Combination; and

(iii) At least a majority of the members of the board of directors of the corporation resulting from such Business Combination were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action taken by the Incumbent Board approving such Business Combination; or

(d) Approval by the shareholders of the Company of a complete liquidation or dissolution of the Company; or

(e) A majority of the Incumbent Board otherwise determines that a Change in Control shall have occurred.

10.03 Plan Provisions

Following a Change in Control, the Plan may not be amended and may not be terminated. Upon a Change in Control, in accordance with Section 10.01, the Plan Document then in existence ("Controlling Plan") shall be provided to the Trustee. The Controlling Plan shall govern all amounts transferred and remain in effect until the Trustee has paid all such amounts to Participants and/or Beneficiaries.

SECTION XI – TREATMENT OF FORMER AUTOMOTIVE GLASS & SERVICES BUSINESS PARTICIPANTS

11.01 Sale of AG&S Business

Upon the closing date (the "Closing Date") of the Company's sale (the "Sale") of its Automotive Glass & Services business (the "AG&S Business"), each Participant who is employed in the AG&S Business and who is hired by the purchaser (the "Purchaser") of the AG&S Business (each, an "Affected AG&S Business Participant") will terminate employment with the Company. The purpose of this Section XI is to set forth the impact of the Sale and such termination of employment upon such Affected AG&S Business Participants under the Plan.

11.02 Eligibility

On and after the Closing Date, each Affected AG&S Business Participant shall cease to be eligible to make deferrals under the Plan or to receive Savings Plan Restoration Contributions or Defined Contribution Retirement Plan Restoration Contributions (except to the extent of any Savings Plan Restoration Contributions or Defined Contribution Retirement Plan Restoration Contributions made after the Closing Date with respect to compensation earned prior to the Closing Date).

11.03 Pre-January 1, 2005 Deferrals and Restoration Contributions

Notwithstanding the provisions of the Preamble, this Plan shall apply to all deferrals by or for Affected AG&S Business Participants, including all deferrals by or for Affected AG&S Business Participants before January 1, 2005. Accordingly, this Plan shall apply to the entire Account of each Affected AG&S Business Participant.

11.04 Separation from Service

Notwithstanding the termination of employment of each Affected AG&S Business Participant with the Company pursuant to the Sale, and pursuant to Treasury Regulation Section 1.409A-1(h)(4), an Affected AG&S Business Participant shall not be treated as having incurred a Separation from Service under the terms of this Plan until such Affected AG&S Business Participant shall terminate employment with the Purchaser and each entity that is required to be aggregated with the Purchaser under Sections 414(b), (c), (m) or (o) and 409A of the Code.

11.05 New Payment Elections

On or before such date as the Administrator may determine (which such date shall be no later than December 31, 2008), an Affected AG&S Business Participant may, in accordance with Section 3.01(B)(1)(.02) of Internal Revenue Service Notice 2007-86 and procedures established by the Administrator for such purpose:

(a) make an election to receive payment of his or her entire Account on January 1, 2009; or

(b) make new retirement payment elections with respect to such Affected AG&S Business Participant's entire Account pursuant to Section 5.02.

NOTICE OF GRANT OF NONQUALIFIED STOCK OPTION AWARD
PPG INDUSTRIES, INC.
AMENDED AND RESTATED OMNIBUS INCENTIVE PLAN

FOR GOOD AND VALUABLE CONSIDERATION, PPG Industries, Inc. (the "Company") hereby grants, pursuant to the provisions of the Company's Amended and Restated Omnibus Incentive Plan, as amended from time to time (the "Plan"), to the Optionee designated in this Notice of Grant of Nonqualified Stock Option Award (the "Notice") an option (the "Option") to purchase the number of shares of the Common Stock of the Company set forth in the Notice (the "Shares"), subject to certain restrictions as outlined below in this Notice and the additional provisions set forth in the attached Terms and Conditions of Nonqualified Stock Option Award (collectively, the "Agreement").

Optionee:	#Participant Name#
Date of Grant:	#GrantDate#
Number of Shares Granted:	#QuantityGranted#
Exercise Price Per Share:	$#GrantPrice#
Vesting Date:	#VestDate_1# In order to vest in any portion of the Option, the Optionee must be continuously employed by the Company or its Subsidiaries, in good standing (as determined by the Company in its sole discretion), from the Date of Grant through and including the applicable vesting date, except as otherwise expressly provided for in the Agreement.
Expiration Date:	#ExpirationDate#
Option Term:	Except as otherwise provided in the Plan, the Option may be exercised during the period beginning on the Vesting Date (as set forth above) and ending inclusive on the Expiration Date (as set forth above). Upon an Optionee's termination of employment, exercise of the Option shall be subject to the provisions described in paragraph 7 of the Terms and Conditions.

PPG Industries, Inc.

_____
By:

TERMS AND CONDITIONS OF NONQUALIFIED STOCK OPTION AWARD

The purpose of this Agreement is to evidence the grant by the Company to the Optionee of an Option pursuant to the PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan, as amended from time to time (the "Plan"). The Notice of Grant of Nonqualified Stock Option Award to which these Terms and Conditions are attached (the "Notice") and these Terms and Conditions are collectively referred to as the "Agreement".

1. Incorporation by Reference; No Right to Continued Employment. The capitalized terms used and not otherwise defined in the Notice and these Terms and Conditions shall have the meanings set forth in the Plan, the text of which is set forth in the Prospectus dated August 1, 2016, concerning the Plan. The Plan is incorporated herein by reference. Nothing contained in the Plan or this Agreement shall give the Optionee the right to be retained in the employment of the Company or any Subsidiary or affect the right of any such employer to terminate the Optionee's employment.

2. Grant. The Company hereby grants to the Optionee the right and option to purchase the number of shares of the Common Stock of the Company set forth in the Notice, on the terms and conditions herein set forth or incorporated by reference.

3. Exercise Price. Subject to adjustment as provided in Section 11.07 of the Plan, the Exercise Price of the shares subject to the Option is set forth in the Notice, which is the Fair Market Value of a share of Common Stock on the Date of Grant.

4. Option Term. Except as otherwise set forth in the Plan or this Agreement, the Option may be exercised as to any or all shares subject to the Option, at any time or from time-to-time, during the period beginning on the Vesting Date (as defined in the Notice) and ending on the Expiration Date (as defined in the Notice), subject to earlier termination as provided herein.

5. Exercise of Option.

(a) The Option may be exercised by the Optionee giving written notice (in such form as may be approved by the Committee) to the Company specifying the number of shares to be purchased. Notwithstanding the other provisions of this Agreement, no Option exercise or issuance of shares of Common Stock pursuant to this Agreement shall be effective if (i) the shares reserved under the Plan are not subject to an effective registration statement at the time of such exercise or issuance, or otherwise eligible for an exemption from registration, or (ii) the Company determines in good faith that such exercise or issuance would violate any applicable Company policy or any securities or other law or regulation. By accepting this Option, the Optionee agrees not to sell any of the shares of Common Stock received under this Option at a time when the applicable laws or Company policies prohibit a sale. Without limiting the foregoing, Optionee's sale of Shares may be subject to any closed trading windows that may be imposed by the Company and must comply with the Company's insider trading policies (as may be amended from time to time by the Company in its sole discretion) and any other applicable securities laws. The Company's insider trading policy may prohibit Optionee from buying or selling Shares.

(b) Unless otherwise determined by the Committee, the Exercise Price of an Option may be paid either (i) by delivery to the Company on the date of exercise (or on such later date as the Senior Vice President and Chief Human Resources Officer or his or her successor may permit) of cash or a check in an amount equal to the Exercise Price, (ii) except for any portion of the Exercise Price which cannot be paid in whole shares which portion will be paid in cash, by delivery to the Company on the next business day following the date of exercise (or on such later date as the Senior Vice President and Chief Human Resources Officer or his or her successor may permit) of

certification of ownership of shares of Common Stock with a Fair Market Value on the date of exercise equal to the Exercise Price (such transaction hereinafter referred to as a “Stock Swap”), (iii) by such methods in accordance with such procedures as may be authorized or permitted by the Committee from time to time (e.g., a cashless exercise program) or (iv) by a combination of (i), (ii) and (iii), in the discretion of the Optionee.

(c) Shares used by an Optionee to initiate a Stock Swap may only be shares owned in the following ways:

(i) In the Optionee’s name (including shares of restricted stock issued pursuant to an award to the Optionee); or

(ii) In the Optionee and the Optionee’s spouse’s name; or

(iii) In a street account, provided that ownership is certified by the broker as being in the Optionee or in the Optionee and spouse; or

(iv) In a revocable trust in the Optionee’s name, provided that beneficial ownership is certified by the trustee as being in the Optionee or in the Optionee and spouse.

(d) As soon as practicable after receipt by the Company of the required notice and payment in full of the Exercise Price (as well as any applicable Tax-Related Items as defined in paragraph 6) for the shares purchased, a certificate or certificates representing the shares to be acquired by the Optionee shall be issued to the Optionee; provided that any certificate(s) for the shares purchased may be retained by the Company or its stock transfer agent or kept in a book-entry account by its stock transfer agent or may have such restrictive legends imprinted thereon prohibiting the transfer of such certificate(s) for such period as may be prescribed by the Committee. Subject to the foregoing, the Optionee shall have the rights of a shareholder with respect to such shares on the date the shares are delivered to the Optionee.

(e) The date of exercise shall be the date the required notice is received by the Company; provided, however, that if payment in full is not received by the Company as described herein or as otherwise permitted by the Committee; such notice shall be deemed not to have been received.

(f) If the Optionee is located outside of the United States, the Option may be exercised in the name of the Optionee through a stockbroker or bank appointed by the Optionee. In these circumstances, the Senior Vice President and Chief Human Resources Officer of the Company or his designee and the Optionee will agree upon the procedure to be followed for the exercise of the Option, as well as any other procedures concerning the shares of the Company.

(g) Except as otherwise determined by the Company in its sole discretion, if, on the immediately preceding business day prior to the Expiration Date, any portion of the Option is vested and exercisable, then such portion shall be automatically exercised upon the market close on such preceding business day. Such exercise shall be carried out pursuant to the procedures implemented by the Company in its sole discretion (including the method of tax withholding). Such exercise shall be carried out only if the Exercise Price Per Share of such Option is lower than the per share price of the Common Stock upon such market close. The Optionee agrees that such exercise is provided solely as a convenience to the Optionee. Because any exercise of all or any portion of the Option is solely the Optionee’s responsibility, the Optionee waives and releases and agrees to indemnify and hold the Company and its affiliates

harmless from and against any and all claims of any kind whatsoever relating to such exercise (or any failure thereof).

6. Responsibility for Taxes. Regardless of any action the Company and/or the Subsidiary employing the Optionee (the "Employer") take with respect to any or all income tax (including U.S. federal, state, and local tax and/or non-U.S. tax), social insurance, payroll tax, payment on account or other tax-related items related to Optionee's participation in the Plan and legally applicable to Optionee or deemed by the Company or the Employer to be an appropriate charge to the Optionee ("Tax-Related Items"), the Optionee acknowledges that the ultimate liability for all Tax-Related Items is and remains the Optionee's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Optionee further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Option, including the grant, vesting and exercise of the Option, the conversion of the Option into shares, the subsequent sale of any shares acquired pursuant to the Option and the receipt of any dividends; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Option to reduce or eliminate the Optionee's liability for Tax-Related Items or achieve any particular tax result. Further, if the Optionee has become subject to tax in more than one jurisdiction, the Optionee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax-withholding event, as applicable, the Optionee shall pay or make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, the Optionee authorizes the Company and/or the Employer, or their respective agents, to satisfy the Tax-Related Items obligation by withholding otherwise deliverable shares of Common Stock. In addition, the Optionee authorizes the Company and/or the Employer, in their sole discretion and pursuant to such procedures as the Company may specify from time to time, to withhold any Tax-Related Items by one or more of the following means: (i) withholding from the proceeds of the sale of shares of Common Stock acquired upon the exercise of the Option either through a voluntary sale or through a mandatory sale arranged by the Company (on the Optionee's behalf pursuant to this authorization); and /or (ii) withholding from any wages or other cash compensation paid to the Optionee by the Company and/or the Employer. The Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates in the Optionee's jurisdiction(s). In the event of over-withholding, the Optionee may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent in Common Stock or if not refunded, the Optionee may seek a refund from the local tax authorities. In the event of under-withholding, the Optionee may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Company and/or the Employer. If the obligation for Tax-Related Items is satisfied by withholding a number of shares as described herein, the Optionee shall be deemed, for tax purposes only, to have been issued the full number of shares of Common Stock subject to the exercised portion of the Option, notwithstanding that a number of shares are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of the Option. The Optionee shall pay to the Company and/or the Employer any amount of Tax-Related Items that is required to be withheld or accounted for in connection with the Option that cannot be satisfied by the means previously described. The Company may refuse to deliver to the Optionee any shares of Common Stock pursuant to the Option if the Optionee fails to comply with his or her obligations in connection with the Tax-Related Items.

7. Termination of Option. Unless the Committee shall determine otherwise, the Option shall immediately expire and will no longer be exercisable at the time the Optionee ceases to be employed by the Company or a Subsidiary. The preceding sentence notwithstanding:

(a) Retirement; Job Elimination; Divestitures. If the Optionee's employment with the Company terminates prior to the Expiration Date, but on or after the first anniversary of the Date of Grant, because of retirement or job elimination, including termination

of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, the Option will not immediately expire, and will become exercisable in full on the Vesting Date (or, if after retirement but prior to the Vesting Date, on the Optionee's death), as if the Optionee's employment continued through the Vesting Date, and will remain exercisable through the Expiration Date; and

(b) Long-Term Disability; Death. If the Optionee's employment with the Company terminates prior to the Expiration Date, but on or after the first anniversary of the Date of Grant, because of long-term disability (as determined in the Committee's sole discretion) or death, the Option will not immediately expire, and will become exercisable in full upon such termination, and will remain exercisable through the Expiration Date.

8. Forfeiture. Notwithstanding any other provisions herein, the Optionee, by execution of this Agreement, agrees and acknowledges that in return for the Option granted by the Company herein; the following continuing conditions shall apply:

(a) If at any time within (i) the term of this Option or (ii) within one (1) year after the Optionee exercises any part of this Option, whichever is latest, the Optionee engages in any activity in competition with any activity of the Company or any of its Subsidiaries, or contrary or harmful to the interests of the Company or any of its Subsidiaries, including, but not limited to: (A) conduct related to the Optionee's employment for which either criminal or civil penalties against the Optionee may be sought, (B) violation of Company (or Subsidiary) Business Conduct Policies, Code of Ethics or, in each case, a similar policy, (C) accepting employment with or serving as a consultant, advisor or in any other capacity to an employer that is in competition with or acting against the interests of the Company or any of its Subsidiaries, including employing or recruiting any present, former or future employee of the Company or any of its Subsidiaries, (D) disclosing or misusing any confidential information or material concerning the Company or any of its Subsidiaries, or (E) participating in a hostile takeover attempt, then (1) this Option shall terminate effective as of the date on which the Optionee enters into such activity, unless terminated sooner by operation of another term or condition of this Agreement or the Plan, and (2) any "Option Gain" realized by the Optionee from exercising all or any portion of this Option within one (1) year prior to the Optionee entering into such activity shall be paid by the Optionee to the Company. "Option Gain" shall mean the gain represented by the Fair Market Value of the shares of Common Stock on the date of exercise over the Exercise Price, multiplied by the number of shares purchased, without regard to any subsequent market price decrease or increase.

(b) By accepting this Agreement, the Optionee consents to a deduction from any amounts the Company or any of its Subsidiaries owes the Optionee from time to time (including amounts owed to the Optionee as wages or other compensation, fringe benefits, or vacation pay, as well as any other amounts owed to the Optionee by the Company or any of its Subsidiaries), to the extent of the amounts owed to the Company by the Optionee under paragraph 8(a) above. Whether or not the Company elects to make any set-off in whole or in part, if the Company does not recover by means of set-off the full amount the Optionee owes it, calculated as set forth above, the Optionee agrees to pay immediately the unpaid balance to the Company.

(c) The Optionee may be released from the Optionee's obligations under paragraphs 8(a) and 8(b) above only if the Committee (or its duly appointed agent) determines, in its sole discretion, that such action is in the best interests of the Company.

9. Acceleration of Vesting. In the event that, during the Change in Control Period (as hereinafter defined), the Optionee is subject to an Involuntary Termination (as hereinafter

defined), then the Option shall become fully vested and immediately exercisable as of such date. If the Optionee is a party to a Change in Control Employment Agreement with the Company (a "Change in Control Agreement"), "Change in Control Period" for purposes of this Agreement shall have the meaning ascribed to the term "Employment Period," as defined in the Change in Control Agreement, and if the Optionee is not a party to a Change in Control Agreement, the term shall mean the period commencing on the date of a Change in Control (as defined in the Plan) and ending on the earlier of the Optionee's date of Retirement and the third anniversary of the effective date of the Change in Control. "Retirement" for purposes of this paragraph 9 shall mean the Optionee's termination of employment on or after (i) with respect to a participant in a tax-qualified defined benefit pension plan sponsored by PPG, an Optionee's "normal retirement date" as defined in such pension plan, (ii) with respect to any Optionee that the Company may subject to compulsory retirement under the Age Discrimination in Employment Act (29 U.S.C. § 621 et. seq.) (ADEA) as a "bona fide executive or a high policy maker," such Optionee's "normal retirement date," (iii) with respect to a participant in the PPG Industries Defined Contribution Retirement Plan, the Optionee's Social Security normal retirement date, provided that such termination is voluntary, or, (iv) with respect to a participant for whom the provisions in (i) through (iii) are not applicable, the Optionee's attainment of age sixty-five (65), provided the termination is voluntary.

"Involuntary Termination" for purposes of this Agreement shall mean, if the Optionee is a party to a Change in Control Agreement, a termination of the Optionee's employment that gives rise to payments and benefits under Section 6 of the Change in Control Agreement, and if the Optionee is not a party to a Change in Control Agreement, shall mean a termination by the Company for any reason other than Cause, death or Disability (as the terms are hereinafter defined). "Cause" for purposes of an Optionee who is not a party to a Change in Control Agreement shall have the same meaning as that term is defined in the Optionee's offer letter or other applicable employment agreement; or, if there is no such definition, "Cause" means, as determined by the Committee in good faith: (i) engaging in any act, or failing to act, or misconduct that is injurious to the Company or its Subsidiaries; (ii) gross negligence or willful misconduct in connection with the performance of duties; (iii) conviction of (or entering a plea of guilty or *nolo contendere* to) a criminal offense (other than a minor traffic offense); (iv) fraud, embezzlement or misappropriation of funds or property of the Company or a Subsidiary; (v) breach of any material term of any agreement between the Optionee and the Company or a Subsidiary relating to employment, consulting or other services, confidentiality, intellectual property or non-competition; (vi) the entry of an order duly issued by any regulatory agency (including federal, state and local regulatory agencies and self-regulatory bodies) having jurisdiction over the Company or a Subsidiary requiring the removal from any office held by the Optionee with the Company or prohibiting or materially limiting the Optionee from participating in the business or affairs of the Company or any Subsidiary. "Disability" for purposes of this Agreement shall mean disability which, after the expiration of more than 52 weeks after its commencement, is determined to be total and permanent by a physician selected by the Company or its insurers.

10. Nontransferability. The Option is not transferable by the Optionee except by will or the laws of descent and distribution, and may not be assigned, hypothecated or otherwise pledged and shall not be subject to execution, attachment or similar process. Further, the Option shall be exercisable during the Optionee's lifetime only by the Optionee personally (or the Optionee's personal representative). Upon any attempt to effect any such disposition, or upon the levy of any such process, the Option shall immediately become null and void and the Option shall be forfeited. The Optionee's Beneficiary may exercise the Optionee's rights to the extent they are exercisable under the Plan following the death of the Optionee.

11. Irrevocability. The rights and Option granted hereby may not be rescinded, modified, canceled or otherwise affected by the Company, except as provided herein (whether expressly or by incorporation by reference), without the written consent of the Optionee, except to the extent doing so would not be materially adverse to the Optionee.

12. Choice of Law; Entire Agreement; Venue. The validity, construction and performance of this Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without reference to any choice of law principles. The Notice, these Terms and Conditions, the Plan, the Change in Control Agreement, and any offer letter and/or employment agreement referenced herein, contain all terms and conditions with respect to the subject matter hereof.

For purposes of litigating any dispute that arises under the Option or this Agreement, the parties hereby submit to and consent to the jurisdiction of the Commonwealth of Pennsylvania, and agree that such litigation shall be conducted in the courts of Allegheny County, Pennsylvania, or other federal courts for the United States for the Western District of Pennsylvania, where this Option grant is made and/or to be performed, and no other courts. The parties agree that, if suit is filed in Allegheny County courts, application will be made by one or both parties, without objection, to have the case heard in the Center for Commercial and Complex Litigation of the Court of Common Pleas of Allegheny County.

13. Severability. If any provision of this Agreement shall be held to be illegal, invalid or unenforceable, that provision will be enforced to the maximum extent permissible and the legality, validity and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

14. Waiver. The Optionee acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

15. Notices. All notices provided for herein shall be in writing and, if to the Company, shall be delivered to the Treasurer of the Company or mailed to its principal office, One PPG Place, Pittsburgh, Pennsylvania 15272, addressed to the attention of the Treasurer, and, if to the Optionee, shall be delivered personally or mailed to the Optionee at the address appearing in the payroll records of the Company or a Subsidiary. Such addresses may be changed at any time by written notice to the other party.

16. Prospectus. By execution of this Agreement, the Optionee acknowledges receipt of the Prospectus dated August 1, 2016, concerning the Plan. The Optionee also acknowledges that the tax information reviewed in the Prospectus relates to United States tax laws and, if the Optionee is not a U.S. taxpayer, not to the tax laws of Optionee's country and should not be relied upon by the Optionee. The Optionee should consult his or her personal tax advisor to obtain advice concerning the tax consequences of the Option as they apply to the Optionee.

17. Further Assurances. The Optionee agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver and perform all additional documents, instruments and agreements, which may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Notice, these Terms and Conditions and the Plan.

18. Nature of Grant. If the Optionee is located outside of the United States, in accepting the grant, the Optionee acknowledges, understands and agrees that:

(1) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Agreement; (2) the grant of the Option is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of Options, or benefits in lieu of Options, even if Options have been granted in the past; (3) all decisions with respect to future Option grants, if any, will be at the sole discretion of the Company; (4) the Optionee's participation in the Plan shall not create a right to further employment with the Employer and shall not interfere with the ability of the Employer to terminate the Optionee's employment relationship at any time with or without cause; (5) the Optionee is voluntarily participating in the Plan;

(6) the Option is an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Company or the Employer, and which is outside the scope of the Optionee's employment contract, if any; (7) the Option, the underlying shares of Common Stock, and the income and value of same, are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Company or any Subsidiary; (8) in the event that the Optionee is not an employee of the Company, the Option grant will not be interpreted to form an employment contract or relationship with the Company; and furthermore, the Option grant will not be interpreted to form an employment contract with the Employer or any Subsidiary of the Company; (9) the future value of the underlying shares is unknown, indeterminable and cannot be predicted with certainty; (10) if the underlying shares do not increase in value, the Option will have no value; (11) if the Optionee exercises the Option and obtains shares, the value of those shares acquired upon exercise may increase or decrease in value, even below the Exercise Price; (12) no claim or entitlement to compensation or damages shall arise from forfeiture of the Option resulting from termination of the Optionee's employment (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Optionee is employed or the terms of the Optionee's employment agreement, if any); (13) for purposes of the Option, the Optionee's employment or service relationship will be considered terminated as of the date the Optionee is no longer actively providing services to the Company or one of its Subsidiaries (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Optionee is employed or the terms of the Optionee's employment agreement, if any), and unless otherwise expressly provided in this Agreement or determined by the Company, (i) the Optionee's right to vest in the Option under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., the Optionee's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the Optionee is employed or the terms of the Optionee's employment agreement, if any); and (ii) the period (if any) during which the Optionee may exercise the Option after such termination of the Optionee's employment or service relationship will commence on the date the Optionee ceases to actively provide services and will not be extended by any notice period mandated under employment laws in the jurisdiction where the Optionee is employed or the terms of the Optionee's employment agreement, if any; the Committee shall have the exclusive discretion to determine when the Optionee is no longer actively providing services for purposes of the Option grant (including whether the Optionee may still be considered to be providing services while on a leave of absence); (14) unless otherwise provided in the Plan or by the Company in its discretion, the Option and the benefits evidenced by this Agreement do not create any entitlement to have the Option or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; (15) unless otherwise agreed with the Company, the Option, the underlying shares of Common Stock, and the income and value of same, are not granted as consideration for, or in connection with, the service the Optionee may provide as a director of any Subsidiary; (16) the Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Optionee's participation in the Plan or acquisition or sale of the underlying shares of Common Stock; and (17) neither the Company, the Employer nor any Subsidiary shall be liable for any foreign exchange rate fluctuation between the Optionee's local currency and the United States Dollar that may affect the value of the Option or of any amounts due to the Optionee pursuant to the exercise of the Option or the subsequent sale of any shares of Common Stock acquired upon exercise.

19. ***Data Privacy. If the Optionee is located outside of the United States:***

Data Privacy Consent. By electing to participate in the Plan via the Company's online acceptance procedure, the Optionee is declaring that he or she agrees with the data processing practices described herein and consents to the collection, processing and use of Personal Data (as defined below) by the Company and the transfer of Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other) data protection law perspective, for the purposes described herein.

Declaration of Consent. The Optionee understands that he or she needs to review the following information about the processing of his or her personal data by or on behalf of the Company, the Employer and/or any Subsidiary as described in the Agreement and any other Plan materials (the "Personal Data") and declare his or her consent. As regards the processing of the Optionee's Personal Data in connection with the Plan and this Agreement, the Optionee understands that the Company is the controller of his or her Personal Data.

Data Processing and Legal Basis. The Company collects, uses and otherwise processes Personal Data about the Optionee for the purposes of allocating shares of Common Stock and implementing, administering and managing the Plan. The Optionee understands that this Personal Data may include, without limitation, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Options or any other entitlement to shares of stock or equivalent benefits awarded, cancelled, exercised, vested, unvested or outstanding in the Optionee's favor. The legal basis for the processing of the Optionee's Personal Data, where required, will be his or her consent.

Stock Plan Administration Service Providers. The Optionee understands that the Company transfers his or her Personal Data, or parts thereof, to Fidelity Stock Plan Services, LLC (and its affiliated companies), an independent service provider based in the United States which assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Optionee's Personal Data with such different service provider that serves the Company in a similar manner. The Optionee understands and acknowledges that the Company's service provider will open an account for him or her to receive and trade shares of Common Stock acquired under the Plan and that he or she will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of the Optionee's ability to participate in the Plan.

International Data Transfers. The Optionee understands that the Company and, as of the date hereof, any third parties assisting in the implementation, administration and management of the Plan, such as Fidelity Stock Plan Services, LLC, are based in the United States. The Optionee understands and acknowledges that his or her country may have enacted data privacy laws that are different from the laws of the United States. The Company's legal basis for the transfer of the Optionee's Personal Data is his or her consent.

Data Retention. The Optionee understands that the Company will use his or her Personal Data only as long as is necessary to implement, administer and manage his or her participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, the Optionee understands and acknowledges that the Company's legal basis for the

processing of his or her Personal Data would be compliance with the relevant laws or regulations. When the Company no longer needs the Optionee's Personal Data for any of the above purposes, the Optionee understands the Company will remove it from its systems.

Voluntariness and Consequences of Denial/Withdrawal of Consent. The Optionee understands that his or her participation in the Plan and his or her consent is purely voluntary. The Optionee may deny or later withdraw his or her consent at any time, with future effect and for any or no reason. If the Optionee denies or later withdraws his or her consent, the Company can no longer offer the Optionee participation in the Plan or offer other equity awards to the Optionee or administer or maintain such awards and the Optionee would no longer be able to participate in the Plan. The Optionee further understands that denial or withdrawal of his or her consent would not affect his or her status or salary as an employee or his or her career and that the Optionee would merely forfeit the opportunities associated with the Plan.

Data Subject Rights. The Optionee understands that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where the Optionee is based and subject to the conditions set out in the applicable law, the Optionee may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Company holds about him or her and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about him or her that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of his or her objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Company to restrict the processing of his or her Personal Data in certain situations where the Optionee feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of the Optionee's Personal Data that he or she has actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or his or her employment and is carried out by automated means. In case of concerns, the Optionee understands that he or she may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of, the Optionee's rights, the Optionee understands that he or she should contact his or her local human resources representative.

20. Nonqualified Status. This Option shall, under no circumstances, be treated as an incentive stock option under Section 422 of the Code.

21. Capitalization Adjustments. The number of shares of Common Stock subject to the Option is subject to adjustment as provided in Section 11.07(a) of the Plan. The Optionee shall be notified of such adjustment and such adjustment shall be binding upon the Company and the Optionee.

22. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means or request the Optionee's consent to participate in the Plan by electronic means. The Optionee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

23. Code Section 409A. It is the intent that the grant, vesting and/or exercise of the Option set forth in this Agreement shall be exempt from the requirements of Section 409A of the Code, and any ambiguities herein will be interpreted to so comply. The Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify this Agreement as may be necessary to ensure that all grants, vesting and exercises provided under this Agreement are made in a manner that is exempt from Section 409A of the Code; provided, however, that the Company makes no representation that the Option provided under this Agreement will be exempt from and/or comply with Section 409A of the Code.

24. Language. By electing to accept this Option, the Optionee acknowledges that he or she is sufficiently proficient in English, or has consulted with an advisor who is sufficiently proficient in English so as to allow the Optionee, to understand the terms and conditions of this Agreement. Further, if the Optionee has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

25. Insider Trading Restrictions/Market Abuse Laws. The Optionee may be subject to insider trading restrictions and/or market abuse laws, based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and the Optionee's country or his or her broker's country, if different, which may affect his or her ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to such shares (*e.g.*, Options), or rights linked to the value of shares of Common Stock (e.g., phantom awards, futures) during such times as the Optionee is considered to have "inside information" regarding the Company (as defined by any applicable laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders the Optionee placed before he or she possessed inside information. Furthermore, the Optionee could be prohibited from (i) disclosing the inside information to any third party which may include fellow employees and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy and under United States law. The Optionee is responsible for ensuring compliance with any applicable restrictions and should consult his or her personal legal advisor on this matter.

26. Foreign Asset/Account Reporting Requirements; Exchange Controls. The Optionee acknowledges that his or her country may have certain foreign asset and/or account reporting requirements and/or exchange controls that may affect his or her ability to acquire or hold shares of Common Stock or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of shares of Common Stock) in a brokerage or bank account outside the Optionee's country. The Optionee may be required to report such accounts, assets or transactions to the tax or other authorities in his or her country. The Optionee also may be required to repatriate sale proceeds or other funds received as a result of his or her participation in the Plan to his or her country through a designated bank or broker and/or within a certain time after receipt. The Optionee acknowledges that it is his or her responsibility to be compliant with such regulations, and the Optionee should consult his or her personal legal advisor for any details.

27. Appendix. Notwithstanding any provision herein, the Optionee's participation in the Plan shall be subject to any additional terms and conditions as set forth in the Appendix for the Optionee's country of residence, if any. Moreover, if the Optionee relocates to another country, the special terms and conditions for such country will apply to the Optionee, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

28. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Optionee's participation in the Plan, on the Option and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary

or advisable for legal or administrative reasons, and to require the Optionee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

29. Compensation Recovery Policy. This Option and any proceeds, gains or other economic benefit received by the Participant from a subsequent sale of Shares issued under this Option shall be subject to the Company's Compensation Recovery Policy in effect as of the date hereof, as may be amended from time to time to comply with applicable laws (the "Compensation Recovery Policy"). The Participant acknowledges and agrees that no recovery or other action related to this Option pursuant to the Compensation Recovery Policy shall constitute an event that triggers or contributes to any right Participant may have to resign for "good reason" or "constructive termination" (or similar term) under any compensatory arrangement with the Company or any of its Subsidiaries. The Participant acknowledges and agrees that the Participant's acceptance of this Option shall be deemed to constitute the Participant's acknowledgement of and consent to the Company's application, implementation and enforcement of the Compensation Recovery Policy

By accepting below, the Optionee agrees that this Option is granted under and governed by the terms and conditions of the Plan and this Agreement.

PPG Industries, Inc.

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By:

If I am subject to the PPG Stock Ownership Requirement Policy, I authorize PPG's stock plan administrator to follow PPG's instructions, including but not limited to, instructions to not accept my orders to transact in company stock received upon vesting of this award that are subject to restriction on sale or transfer imposed by PPG in the event that I do not meet the required stock ownership level under PPG's Stock Ownership Requirement Policy, including instructions to not allow shares of company stock received upon vesting of this award to be transferred out of my account with PPG's stock plan administrator. I acknowledge and agree that execution of my orders to transact in or to transfer shares of company stock received upon vesting of this award may be delayed or never occur.

Fidelity Stock Plan Services, LLC, provides recordkeeping and/or administrative services to your company's equity compensation plan, in addition to any services provided directly to the plan by your company or its service providers.

APPENDIX

PPG INDUSTRIES, INC.
TERMS AND CONDITIONS OF NONQUALIFIED STOCK OPTION AWARD
(NON-U.S. LOCATIONS)

This Appendix includes special terms and conditions that govern the Award granted to the Optionee if the Optionee resides in one of the countries listed herein.

If the Optionee is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the Company shall, in its sole discretion, determine to what extent the terms and conditions included herein will apply to the Optionee.

This Appendix may also include information regarding exchange controls and certain other issues of which the Optionee should be aware with respect to his or her participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of November 2023. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Optionee not rely on the information noted herein as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time the Optionee exercises the Option or when the Optionee sells shares of Common Stock acquired under the Plan.

In addition, the information is general in nature and may not apply to the Optionee's particular situation, and the Company is not in a position to assure him or her of any particular result. **Accordingly, the Optionee should seek appropriate professional advice as to how the relevant laws in the Optionee's country apply to his or her specific situation.**

If the Optionee is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the information contained in this Appendix may not be applicable to him or her.

Capitalized terms used but not defined herein shall have the meanings assigned to them in the Agreement (of which this Appendix is a part) and the Plan.

Finland

There are no country-specific provisions.

France

Award Not Tax-Qualified. The Options granted under this Agreement are not intended to qualify for specific tax and social security treatment pursuant to Sections L. 225-177 to L. 225-186-1 and Sections L. 22-10-56 and L. 22-10.58 of the French Commercial Code, as amended.

Language Consent. By clicking on the "I accept" button or by signing and returning this document providing for the terms and conditions of the grant, the Optionee confirms having read and understood the documents relating to this grant (the Plan and this Agreement) which were provided to the Optionee in the English language. The Optionee accepts the terms of these documents accordingly.

En cliquant sur le bouton "J'accepte" ou en signant et renvoyant le présent document décrivant les termes et conditions de cette attribution, le Bénéficiaire de l'option confirme avoir lu et

compris les documents relatifs à cette attribution (le Plan et ce Contrat) qui ont été communiqués au Bénéficiaire de l'option en langue anglaise. Le Bénéficiaire de l'option en accepte les termes en connaissance de cause.

Mexico

Labor Law Policy and Acknowledgement. In accepting the Award, the Optionee expressly recognizes that PPG Industries, Inc., with registered offices at One PPG Place, Pittsburgh, Pennsylvania 15272, U.S.A., is solely responsible for the administration of the Plan and that the Optionee's participation in the Plan and acquisition of shares of Common Stock do not constitute an employment relationship between the Optionee and PPG Industries, Inc. since the Optionee is participating in the Plan on a wholly commercial basis and the Optionee's sole Employer is PPG INDUSTRIES de MEXICO S.A. de C.V. or Grupo Comex, S.A. de C.V ("PPG-Mexico"). Based on the foregoing, the Optionee expressly recognizes that the Plan and the benefits that the Optionee may derive from participating in the Plan do not establish any rights between the Optionee and the Employer, PPG-Mexico, and do not form part of the employment conditions and/or benefits provided by PPG-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of the Optionee's employment.

The Optionee further understands that the Optionee's participation in the Plan is as a result of a unilateral and discretionary decision of PPG Industries, Inc.; therefore, PPG Industries, Inc. reserves the absolute right to amend and/or discontinue the Optionee's participation at any time without any liability to the Optionee.

Finally, the Optionee hereby declares that the Optionee does not reserve to the Optionee any action or right to bring any claim against PPG Industries, Inc. for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and the Optionee therefore grants a full and broad release to PPG Industries, Inc., its affiliates, branches, representation offices, its shareholders, directors, officers, agents or legal representatives with respect to any claim that may arise.

Reconocimiento de Ausencia de Relación Laboral y Declaración de la Política. *Aceptando este Premio, el Titular de la Opción reconoce que PPG Industries, Inc. y sus oficinas registradas en One PPG Place, Pittsburgh, Pennsylvania, U.S.A., es el único responsable de la administración del Plan y que la participación del Titular de la Opción en el mismo y la adquisición de Acciones no constituye de ninguna manera una relación laboral entre el Titular de la Opción y PPG Industries, Inc., toda vez que la participación del Titular de la Opción en el Plan deriva únicamente de una relación comercial con PPG Industries, Inc., reconociendo expresamente que el único empleador del Titular de la Opción lo es PPG INDUSTRIES de MEXICO S.A. de C.V. o Grupo Comex, S.A. de C.V ("PPG-Mexico"). Derivado de lo anterior, el Titular de la Opción expresamente reconoce que el Plan y los beneficios que pudieran derivar del mismo no establecen ningún derecho entre el Titular de la Opción y su empleador, PPG-México, y no forman parte de las condiciones laborales y/o prestaciones otorgadas por PPG-México, y expresamente el Titular de la Opción reconoce que cualquier modificación al Plan o la terminación del mismo de manera alguna podrá ser interpretada como una modificación de los condiciones de trabajo del Titular de la Opción.*

Asimismo, el Titular de la Opción entiende que su participación en el Plan es resultado de la decisión unilateral y discrecional de PPG Industries, Inc., por lo tanto, PPG Industries, Inc. se reserva el derecho absoluto para modificar y/o terminar la participación del Titular de la Opción en cualquier momento, sin ninguna responsabilidad para el Titular de la Opción.

Finalmente, el Titular de la Opción manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de PPG Industries, Inc., por cualquier compensación o daño en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia el Titular de la Opción otorga un amplio y total finiquito a PPG Industries, Inc., sus Entidades Relacionadas, afiliadas, sucursales, oficinas de representación, sus accionistas,

directores, agentes y representantes legales con respecto a cualquier demanda que pudiera surgir.

Switzerland

Securities Law Notice. Because this is a private offering in Switzerland, the Option is not subject to registration in Switzerland. Neither this document nor any other materials relating to the Option (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed or otherwise made publicly available in Switzerland to any person other than an employee of the Company or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority (FINMA).

United Kingdom

Responsibility for Taxes. The following supplements the Responsibility for Taxes paragraph of the Agreement:

Without limitation to the Responsibility for Taxes paragraph of the Agreement, the Optionee agrees that the Optionee is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items as and when requested by the Company or the Employer or by HM Revenue and Customs ("HMRC") (or any other tax authority or any other relevant authority). The Optionee also agrees to indemnify and keep indemnified the Company and the Employer against any Tax–Related Items that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on the Optionee's behalf.

Notwithstanding the foregoing, if the Optionee is a director or executive officer of the Company (within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply. In such case, if the amount of any income tax due is not collected from or paid by the Optionee within 90 days of the end of the UK tax year in which an event giving rise to the indemnification described above occurs, the amount of any uncollected income tax may constitute a benefit to the Optionee on which additional income tax and national insurance contributions ("NICs") may be payable. The Optionee will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Employer for the value of any employee NICs due on this additional benefit, which the Company or the Employer may recover from the Optionee at any time thereafter by any of the means referred to in this Agreement.

Exhibit 10.13

GRANT NOTICE FOR

TSR SHARE AWARD

#GrantDate#

PPG Industries, Inc. (the "Company") and the Participant identified below are parties to a Global TSR Share Award Agreement dated as of #GrantDate+C# and attached to this Grant Notice (the "Agreement"). Capitalized terms used in this Grant Notice shall have the respective meanings given to such terms in the Agreement or in the Plan (as defined in the Agreement), unless otherwise defined in this Grant Notice. This Grant Notice confirms the grant to the Participant of an Award providing for the issuance of the number of shares of Common Stock set forth below upon the achievement of performance objectives based on the total shareholder return of the Company ("TSR Shares") with the terms set forth below. This Grant Notice is hereby incorporated by reference into and forms a part of the Agreement.

Participant Name:	#ParticipantName#
Date of Grant:	#GrantDate#
Target Number of TSR Shares Subject to Award:	#QuantityGranted#
Dividend Equivalents:	"Dividend Equivalents" are granted with respect to this TSR Share Award. "Dividend Equivalents" means the right to receive at the end of the Award Period, the equivalent value (in cash or shares) of dividends paid during the Award Period on the actual number of TSR Shares earned during the Award Period.
Award Period:	[Performance Period]
Award Goals:	Vesting of the Award shall be determined using the table below, provided that the Participant must be continuously employed by the Company or its Subsidiaries, in good standing (as determined by the Company in its sole discretion), through and including the last day of the Award Period, subject to the provisions of the Agreement regarding retirement, disability, death, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion. The Award Goals for the Award Period is PPG's total shareholder return ("TSR") compared to the TSR for each of the companies (the "Indexed Companies") that comprise the S&P 500 as of the first day of the Award Period, excluding any companies that have been removed from such index because they cease to be publically traded during the Award Period, such as due to acquisitions, a going-private transaction, or a bankruptcy/insolvency. TSR shall be calculated based on the formula determined by the Committee. The payout will be based 100% on PPG's TSR ranking against the Indexed Companies. The following payout performance levels have been established:

PPG TSR Percentile Ranking Against Indexed Companies (with linear interpolation in between tiers)

Ranking (percentile)	Payout of Contingent Grant (%)
>= 90th	200%
80th	175%
70th	150%
60th	125%
50th	100%
40th	75%
30th	50%
<30th	No Award

PPG Industries, Inc.

_____

By:

GLOBAL TSR SHARE AWARD AGREEMENT

[DATE OF GRANT]

This GLOBAL TSR SHARE AWARD AGREEMENT (this "Agreement") is entered into as of the date first written above by and between PPG Industries, Inc. (the "Company") and #ParticipantName+C# (the "Participant").

The Company maintains the PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan (as amended from time to time, the "Plan"), which is incorporated into and forms a part of this Agreement, and the Participant has been selected by the Company to receive an Award under the Plan. Capitalized terms used in this Agreement shall, unless defined elsewhere in this Agreement, have the respective meanings given to such terms in the Grant Notice (as defined below) or the Plan.

The Award of TSR Shares shall be confirmed by a separate Grant Notice to which this Agreement is attached (the "Grant Notice"), specifying the Date of Grant of the Award, the number of TSR Shares granted and the Award Goals (as defined in the Grant Notice) applicable to such TSR Shares. Each TSR Share is a bookkeeping entry representing the equivalent in value of a share of Common Stock. Such Award shall be subject to the terms and conditions of the Plan and this Agreement. Such Grant Notice shall be deemed incorporated by reference into this Agreement.

NOW, THEREFORE, the Company and the Participant, intending to be legally bound, agree as follows:

1. Terms and Conditions of the Award.

A. This Agreement sets forth the terms and conditions applicable to the Award of TSR Shares confirmed in the Grant Notice. The Award of TSR Shares is made under Article VIII of the Plan. Unless and until the TSR Shares are vested in the manner set forth in paragraph 1.G. and 2.A. hereof, the Participant shall have no right to settlement of any such TSR Shares.

B. The Committee may terminate the Award at any time during the Award Period if, in its sole discretion, the Committee determines that the Participant is no longer in a position to have a substantial opportunity to influence the long-term growth of the Company.

C. The Participant shall be entitled to a Dividend Equivalent with respect to the number of TSR Shares that are actually earned or to which the Participant is determined to be entitled to in accordance with this paragraph 1, in an aggregate amount equal to the product of (x) the number of TSR Shares that are earned and/or become payable and (y) the sum of all dividends paid on the Common Stock during the period commencing on the first day of the Award Period and ending on the date the TSR Shares are paid to the Participant. Notwithstanding the foregoing, Dividend Equivalents with respect to any unvested portion of this Award shall be subject to the same vesting and forfeiture restrictions as the TSR Shares awarded hereunder. Each Dividend Equivalent is a bookkeeping entry representing the equivalent in value of a dividend paid on a share of Common Stock payable in accordance with the provisions of paragraph 2 hereof. Unless and until the TSR Shares are vested and certified in the manner set forth in paragraph 1.G. and 2.A. hereof, the Participant shall have no right to settlement of any such Dividend Equivalents. If the Participant is a participant in the Deferred Compensation Plan, then, unless prohibited under applicable law or otherwise determined by the Committee in its discretion, the value of such Dividend Equivalents shall be automatically deferred, on behalf of the Participant, into the Participant's account under the Deferred Compensation Plan in accordance with the Participant's investment elections under such plan. To the extent the Dividend Equivalents have not been deferred, the Dividend Equivalents shall be paid to the Participant at the same time and in the same form the underlying TSR Shares are paid as contemplated in paragraph 2.A. hereof. For purposes of the time and form of payment requirements of Section 409A of the Code, such Dividend Equivalents shall be treated separately from the TSR Shares.

D. Prior to settlement of any vested TSR Shares, such TSR Shares will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of

the Company. The Company's obligations under this Agreement shall be unfunded and unsecured, and no special or separate fund shall be established and no other segregation of assets shall be made and the Participant shall have no greater rights than an unsecured general creditor of the Company. Except as otherwise specifically provided in the Grant Notice or this Agreement, the Participant shall have no rights as a stockholder of the Company by virtue of this Award unless and until such Award is determined to be vested and resulting shares of Common Stock are issued to the Participant.

E. If the Participant's employment with the Company or any Employer terminates during the Award Period but, on or after the first anniversary of the Date of Grant because of retirement, disability, or job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, the Participant shall be entitled to a prorated Award which shall be determined by multiplying the number of TSR Shares to which the Participant would otherwise have been entitled had the Participant continued in employment through the duration of the Award Period by a fraction, the numerator of which is the number of whole months the Participant was employed during the Award Period and the denominator of which is the total number of calendar months in the Award Period, and such Award shall be paid as if the Participant had continued employment, subject to paragraph 2.C. hereof. In the event of the Participant's death during the Award Period but on or after the first anniversary of the Date of Grant, the Committee, in its sole discretion, shall determine the number of TSR Shares to which the Participant should be entitled, if any, not to exceed the maximum number of TSR Shares that are eligible to vest based on actual performance under the Award and such Award shall be paid as if the Participant had continued employment, subject to paragraph 2.C. hereof.

F. If the Participant's active employment with the Company or any Employer terminates during the Award Period for any reason other than retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, or for any reason before the first anniversary of the Date of Grant, the Participant's Award shall be forfeited on the date of such termination; provided, however, that the Committee, in its sole discretion, may determine that the Participant will be entitled to a full or partial payout with respect to the Award.

G. The Committee shall determine the extent, if any, to which the applicable Award Goals have been attained and the extent, if any, to which the Award has been earned by the Participant, on or before March 15 following the end of the Award Period (the "Determination Date").

H. In the event that, during the Change in Control Period (as hereinafter defined), the Participant is subject to an Involuntary Termination (as hereinafter defined), then a number of TSR Shares determined by the Committee, in its sole discretion, but in no event fewer than the number of TSR Shares payable at the "target" level, shall become fully vested, and the payout of the Award shall be made as soon as practicable following the date of the Involuntary Termination, subject to paragraph 2.C. hereof (for avoidance of doubt, the TSR Shares that vest pursuant to this paragraph 1.H. shall not be subject to the performance and determination procedures contemplated by paragraph 1.G. hereof). The amount of any cash to be paid in lieu of Common Stock, if any, shall be determined using the average of the closing sale prices reported on the New York Stock Exchange-Composite Tape for the Common Stock for all days in the last full month prior to the date of such Involuntary Termination during which the New York Stock Exchange was open. The Company and the Participant shall take all steps necessary (including with regard to post-termination services by the Participant) to ensure that an Involuntary Termination constitutes a "separation from service" within the meaning of Section 409A of the Code, and notwithstanding anything contained herein to the contrary, the date on which a separation from service takes place for reasons resulting in an Involuntary Termination shall be the date of the Involuntary Termination.

If the Participant is a party to a Change in Control Employment Agreement with the Company (a "Change in Control Agreement"), "Change in Control Period" for purposes of this Agreement shall have the meaning ascribed to the term "Employment Period," as defined in the Change in Control Agreement, and if the Participant is not a party to a

Change in Control Agreement, the term shall mean the period commencing on the date of a Change in Control (as defined in the Plan) and ending on the earlier of the Participant's date of Retirement and the last day of the Award Period. "Retirement" for purposes of this paragraph 1.H. shall mean the Participant's termination of employment on or after, (i) with respect to a participant in a tax-qualified defined benefit pension plan sponsored by PPG, an Participant's "normal retirement date" as defined in such pension plan, (ii) with respect to any Participant that the Company may subject to compulsory retirement under the Age Discrimination in Employment Act (29 U.S.C. § 621 et. seq.) (ADEA) as a "bona fide executive or a high policy maker", such Participant's "normal retirement date", (iii) with respect to a participant in the PPG Industries Defined Contribution Retirement Plan, the Participant's Social Security normal retirement date, provided that such termination is voluntary, or, (iv) with respect to a participant for whom the provisions in (i) through (iii) are not applicable, the Participant's attainment of age sixty-five (65), provided the termination is a voluntary resignation by the Participant.

"Involuntary Termination" for purposes of this Agreement shall mean, if the Participant is a party to a Change in Control Agreement, a termination of the Participant's employment that gives rise to payments and benefits under Section 6 of the Change in Control Agreement, and if the Participant is not a party to a Change in Control Agreement, shall mean a termination by the Company for any reason other than Cause, death or Disability (as the terms are hereinafter defined). "Cause" for purposes of a Participant who is not a party to a Change in Control Agreement shall have the same meaning as that term is defined in the Participant's offer letter or other applicable employment agreement; or, if there is no such definition, "Cause" means, as determined by the Committee in good faith: (i) engaging in any act, or failing to act, or misconduct that is injurious to the Company or its Subsidiaries; (ii) gross negligence or willful misconduct in connection with the performance of duties; (iii) conviction of (or entering a plea of guilty or *nolo contendere* to) a criminal offense (other than a minor traffic offense); (iv) fraud, embezzlement or misappropriation of funds or property of the Company or a Subsidiary; (v) breach of any material term of any agreement between the Participant and the Company or a Subsidiary relating to employment, consulting or other services, confidentiality, intellectual property or non-competition; (vi) the entry of an order duly issued by any regulatory agency (including federal, state and local regulatory agencies and self-regulatory bodies) having jurisdiction over the Company or a Subsidiary requiring the removal from any office held by the Participant with the Company or prohibiting or materially limiting the Participant from participating in the business or affairs of the Company or any Subsidiary. "Disability" for purposes of this Agreement shall mean disability, which, after the expiration of more than 52 weeks after its commencement, is determined to be total and permanent by a physician selected by the Company or its insurers.

I. The Plan is established voluntarily by the Company, is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, except as otherwise expressly provided in the Plan and this Agreement.

J. The Award is exceptional, voluntary and occasional and does not create any contractual or other right to receive future awards of TSR Shares, or benefits in lieu of TSR Shares even if TSR Shares have been awarded in the past.

K. All decisions with respect to future awards, if any, will be at the sole discretion of the Company.

L. The Participant's participation in the Plan is voluntary.

M. For Participants resident outside of the United States, the TSR Shares are an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Company or, if different, the Subsidiary employing the Participant (the "Employer") and the TSR Shares are outside the scope of the Participant's employment contract, if any.

N. The TSR Shares, the underlying shares of Common Stock, and the income and value of same, are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculation of any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or

retirement or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Company or any Subsidiary.

O. Neither the award of TSR Shares nor any provision of this Agreement, the Plan or any policies adopted pursuant to the Plan confer upon the Participant any right with respect to employment or continuation of current employment with the Company or any Subsidiary, and in the event that the Participant is not an employee of the Company, the award of TSR Shares shall not be interpreted to form an employment contract or relationship with the Company or any Subsidiary.

P. The future value of the underlying shares of Common Stock is unknown, indeterminable and cannot be predicted with certainty.

Q. No claim or entitlement to compensation or damages shall arise from forfeiture of the TSR Shares resulting from termination of the Participant's employment (for any reason whatsoever and whether or not in breach of local labor laws).

R. In the event of involuntary termination of the Participant's employment during the Award Period for any reason other than retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death (whether or not in breach of local labor laws), the Participant's right to receive and vest in TSR Shares under the Plan, if any, will terminate effective as of the date that the Participant is no longer actively employed and will not be extended by any notice period mandated under local law (*e.g.*, active employment would not include a period of "garden leave" or similar period pursuant to local law); the Committee shall have the exclusive discretion to determine when the Participant is no longer actively employed for purposes of the Award.

S. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan or sale of the underlying shares of Common Stock.

T. The Participant should consult with his or her own personal tax, legal and financial advisors regarding the Participant's participation in the Plan before taking any action related to the Plan or TSR Shares.

U. Unless otherwise provided in the Plan or by the Company in its discretion, the Award and the benefits evidenced by this Agreement do not create any entitlement to have the Award or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company.

V Unless otherwise agreed with the Company, the Award, the underlying shares of Common Stock and the income and value of same, are not granted as consideration for, or in connection with, the service the Participant may provide as a director of any Subsidiary.

W. Neither the Company, the Employer nor any Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the Award or of any amounts due to the Participant pursuant to the vesting/settlement of the Award or the subsequent sale of any shares of Common Stock acquired upon vesting/settlement.

2. Payout on Account of Awards.

A. Upon attainment of the Award Goals in accordance with paragraph 1.G. hereof and satisfaction of all other applicable conditions as to the issuance of the TSR Shares, and otherwise subject to this Agreement and the terms of the Plan, the Participant shall be entitled to the number of shares of Common Stock constituting the Award as determined by the Committee. The Participant shall be entitled to receive payout of the vested Award in the form of cash, shares of Common Stock or a combination of cash and shares, less any Tax-Related Items as defined in paragraph 7, as determined by the Committee in its sole discretion. The amount of any cash to be paid in lieu of Common Stock, if any, shall

be determined using the average of the closing sale prices reported on the New York Stock Exchange-Composite Tape for the Common Stock for all days in the month of December during which the New York Stock Exchange was open in the last year of the Award Period to which the Award relates.

B. Any shares of Common Stock issued to the Participant with respect to his or her Award shall be subject to such restrictions as the Committee may deem advisable under the rules, regulations and other requirements of the Securities and Exchange Commission, the New York Stock Exchange and any applicable state or foreign securities laws, and the Committee may cause a legend or legends to be endorsed on any stock certificates for such shares making appropriate references to such legal restrictions.

C. Except as otherwise provided in this Agreement, and, for Participants located in the United States, except in the event the Participant is permitted and has made an election to defer payout of the TSR Shares pursuant to the terms and conditions established by the Company, the issuance of the shares of Common Stock (or payment of cash in lieu thereof) in accordance with the provisions of paragraph 1 and this paragraph 2 will be delivered by March 15 of the calendar year following the earlier of (i) the taxable year that includes the last day of the Award Period or, (ii) to the extent applicable under the provisions of paragraph 1.H. hereof, the date of an Involuntary Termination following a Change in Control. Payout of TSR Shares that have been deferred shall be governed by the terms and conditions of the deferral election form.

3. Continuing Conditions. Notwithstanding any other provisions herein, the Participant, by execution of this Agreement, agrees and acknowledges that in return for the Award granted by the Company in this Agreement, the following continuing conditions shall apply:

A. If at any time prior to the expiration of the Award Period or within one (1) year after the Award Period the Participant engages in any activity in competition with any activity of the Company or any of its Subsidiaries, or contrary or harmful to the interests of the Company or any of its Subsidiaries, including, but not limited to: (1) conduct related to the Participant's employment for which either criminal or civil penalties against the Participant may be sought; (2) violation of Company (or Subsidiary) Code of Ethics or similar policy; (3) accepting employment with or serving as a consultant, advisor or in any other capacity to an employer that is in competition with or acting against the interests of the Company or any of its Subsidiaries, including employing or recruiting any present, former or future employee of the Company or any of its Subsidiaries; (4) disclosing or misusing any confidential information or material concerning the Company or any of its Subsidiaries; or (5) participating in a hostile takeover attempt, then this Award shall terminate effective as of the date on which the Participant enters into such activity, unless terminated sooner by operation of another term or condition of this Agreement, and any "Award Gain" realized by the Participant shall be paid by the Participant to the Company. "Award Gain" shall mean the cash and the Fair Market Value of the Common Stock delivered to the Participant pursuant to paragraph 2 on the date of such delivery times the number of shares so delivered. Any shares of Common Stock deferred by the Participant shall be considered to have been delivered for the purpose of this paragraph 3.

B. By accepting this Agreement, the Participant consents to a deduction from any amounts the Company or any of its Subsidiaries owes the Participant from time to time (including amounts owed the Participant as wages or other compensation, fringe benefits or vacation pay, as well as any other amounts owed to the Participant by the Company or any of its Subsidiaries), to the extent of the amounts payable to the Company by the Participant under paragraph 3.A. above. Whether or not the Company elects to make any set-off in whole or in part, if the Company does not recover by means of set-off the full amount payable by the Participant, calculated as set forth above, the Participant agrees to pay immediately the unpaid balance to the Company.

C. The Participant may be released from the Participant's obligations under paragraphs 3.A and 3.B above only if the Committee determines, in its sole discretion that such action is in the best interest of the Company.

4. Award Subject to Plan Provisions. Unless otherwise expressly provided in the Grant Notice or this Agreement, the TSR Share Award shall be subject to the provisions of the Plan, including,

without limitation, Article XI. In the event of any conflict between this Agreement and either the Grant Notice or the Plan, the Grant Notice or Plan, as applicable, shall control over this Agreement.

5. Applicable Law; Entire Agreement; Venue. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without reference to any choice of law principles. The Grant Notice, this Agreement, the Plan, the Change in Control Agreement, and any offer letter and/or employment agreement referenced herein, contain all terms and conditions with respect to the subject matter hereof.

For purposes of litigating any dispute that arises under the Award or this Agreement, the parties hereby submit to and consent to the jurisdiction of the Commonwealth of Pennsylvania, and agree that such litigation shall be conducted in the courts of Allegheny County, Pennsylvania, or other federal courts for the United States for the Western District of Pennsylvania, where this Award of TSR Shares is made and/or to be performed, and no other courts. The parties agree that, if suit is filed in Allegheny County courts, application will be made by one or both parties, without objection, to have the case heard in the Center for Commercial and Complex Litigation of the Court of Common Pleas of Allegheny County.

6. Further Assurances. The Participant agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver and perform all additional documents, instruments and agreements (including, without limitation, stock powers with respect to shares of Common Stock issued or otherwise distributed in relation to this Award) which may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Grant Notice, this Agreement and the Plan.

7. Taxes. Regardless of any action the Company and/or the Employer take with respect to any or all income tax (including U.S. federal, state, and local tax and/or non-U.S. tax), social insurance, payroll tax, payment on account or other tax-related items related to the Participant's participation in the Plan and legally applicable to the Participant or deemed by the Company or the Employer to be an appropriate charge to the Participant ("Tax-Related Items"), the Participant acknowledges that the ultimate liability for all Tax-Related Items is and remains the Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award, including the grant and vesting of the TSR Shares, the determination of the Award Goals, the conversion of the TSR Shares into shares or the receipt of an equivalent cash payment, the subsequent sale of any shares acquired pursuant to the TSR Shares and the receipt of any dividends or Dividend Equivalents; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Award to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant has become subject to tax in more than one jurisdiction, the Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax-withholding event, as applicable, the Participant shall pay or make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items.

In this regard, the Participant authorizes the Company and/or the Employer, or their respective agents, to satisfy the Tax-Related Items obligation by one or more of the following:

(i) withholding from the proceeds of the sale of shares of Common Stock acquired upon the vesting/settlement of the Award either through a voluntary sale or through a mandatory sale arranged by the Company (on the Participant's behalf pursuant to this authorization); and/or

(ii) withholding from any wages or other cash compensation paid to the Participant by the Company and/or the Employer or from any equivalent cash payment received in connection with the Award; and/or

(iii) withholding in shares of Common Stock to be issued upon settlement of the TSR Shares, provided, however that if the Participant is a Section 16 officer of the Company under the Exchange Act, then the Company may withhold in shares of Common Stock upon the

relevant taxable or tax withholding event only if the use of such withholding method is not problematic under applicable tax or securities law or has materially adverse accounting consequences, in which case, the obligation for Tax-Related Items may be satisfied by one or a combination of methods (i) and (ii) above.

The Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates in the Participants jurisdiction(s). In the event of over-withholding, the Participant may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent in Common Stock or if not refunded, the Participant may seek a refund from the local tax authorities. In the event of under-withholding, the Participant may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Company and/or the Employer. If the obligation for Tax-Related Items is satisfied by withholding a number of shares as described herein, the Participant shall be deemed, for tax purposes only, to have been issued the full number of shares of Common Stock subject to the vested portion of the Award, notwithstanding that a number of shares are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of the Award. The Participant shall pay to the Company and/or the Employer any amount of Tax-Related Items that is required to be withheld or accounted for in connection with the TSR Shares that cannot be satisfied by the means previously described. The Company may refuse to deliver to the Participant any shares of Common Stock pursuant to the Award if the Participant fails to comply with his or her obligations in connection with the Tax-Related Items.

Anything in this paragraph 7 to the contrary notwithstanding, the number of shares of Common Stock subject to TSR Share Awards that will be permitted to be released and withheld (or sold on the Participant's behalf) to satisfy any Tax-Related Items arising prior to the date the shares are scheduled to be delivered pursuant to paragraph 2.C. hereof for any portion of the TSR Shares that are considered nonqualified deferred compensation subject to Section 409A of the Code shall not exceed the number of shares of Common Stock that equals the liability for the Tax-Related Items.

8. Transfer Restrictions. This Award and the TSR Shares are not transferable other than by will or the laws of descent and distribution, and may not be assigned, hypothecated or otherwise pledged and shall not be subject to execution, attachment or similar process. Upon any attempt to effect any such disposition, or upon the levy of any such process, the Award shall immediately become null and void and the TSR Shares shall be forfeited.

9. Capitalization Adjustments. The number of TSR Shares awarded is subject to adjustment as provided in Section 11.07(a) of the Plan. The Participant shall be notified of such adjustment and such adjustment shall be binding upon the Company and the Participant.

10. Securities Law Compliance. Notwithstanding anything to the contrary contained herein, no shares of Common Stock shall be issued to the Participant upon vesting of this Award unless the Common Stock is then registered under the Securities Act, or, if such Common Stock is not then so registered, the Company has determined that such vesting and issuance would be exempt from the registration requirements of the Securities Act. Participant's sale of Shares may be subject to any closed trading windows that may be imposed by the Company and must comply with the Company's insider trading policies (as may be amended from time to time by the Company in its sole discretion) and any other applicable securities laws. The Company's insider trading policy may prohibit Participant from buying or selling Shares. By accepting this Award, the Participant agrees not to sell any of the shares of Common Stock received under this Award at a time when the applicable laws or Company policies prohibit a sale.

11. ***Data Privacy. For Participants located outside of the United States:***

Data Privacy Consent. By electing to participate in the Plan via the Company's online acceptance procedure, the Participant is declaring that he or she agrees with the data processing practices described herein and consents to the collection, processing and use of Personal Data (as defined below) by the Company and the transfer of Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other) data protection law perspective, for the purposes described herein.

***Declaration of Consent**. The Participant understands that he or she needs to review the following information about the processing of his or her personal data by or on behalf of the Company, the Employer and/or any Subsidiary as described in the Agreement and any other Plan materials (the "Personal Data") and declare his or her consent. As regards the processing of the Participant's Personal Data in connection with the Plan and this Agreement, the Participant understands that the Company is the controller of his or her Personal Data.*

***Data Processing and Legal Basis**. The Company collects, uses and otherwise processes Personal Data about the Participant for the purposes of allocating shares of Common Stock and implementing, administering and managing the Plan. The Participant understands that this Personal Data may include, without limitation, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all TSR Shares or any other entitlement to shares of stock or equivalent benefits awarded, cancelled, exercised, vested, unvested or outstanding in the Participant's favor. The legal basis for the processing of the Participant's Personal Data, where required, will be his or her consent.*

***Stock Plan Administration Service Providers**. The Participant understands that the Company transfers his or her Personal Data, or parts thereof, to Fidelity Stock Plan Services, LLC (and its affiliated companies), an independent service provider based in the United States which assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participant's Personal Data with such different service provider that serves the Company in a similar manner. The Participant understands and acknowledges that the Company's service provider will open an account for him or her to receive and trade shares of Common Stock acquired under the Plan and that he or she will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of the Participant's ability to participate in the Plan.*

***International Data Transfers**. The Participant understands that the Company and, as of the date hereof, any third parties assisting in the implementation, administration and management of the Plan, such as Fidelity Stock Plan Services, LLC, are based in the United States. The Participant understands and acknowledges that his or her country may have enacted data privacy laws that are different from the laws of the United States. The Company's legal basis for the transfer of the Participant's Personal Data is his or her consent.*

***Data Retention**. The Participant understands that the Company will use his or her Personal Data only as long as is necessary to implement, administer and manage his or her participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, the Participant understands and acknowledges that the Company's legal basis for the processing of his or her Personal Data would be compliance with the relevant laws or regulations. When the Company no longer needs the Participant's Personal Data for any of the above purposes, the Participant understands the Company will remove it from its systems.*

***Voluntariness and Consequences of Denial/Withdrawal of Consent**. The Participant understands that his or her participation in the Plan and his or her consent is purely voluntary. The Participant may deny or later withdraw his or her consent at any time, with future effect and for any or no reason. If the Participant denies or later withdraws his or her consent, the Company can no longer offer the Participant participation in the Plan or offer other equity awards to the Participant or administer or maintain such awards and the Participant would no longer be able to participate in the Plan. The Participant further understands that denial or withdrawal of his or her consent would not affect his or her status or salary as an employee or his or her career and that the Participant would merely forfeit the opportunities associated with the Plan.*

***Data Subject Rights**. The Participant understands that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where the Participant is based and subject to the conditions set out in the applicable law, the Participant may have, without limitation, the rights to (i) inquire whether and what kind*

of Personal Data the Company holds about him or her and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about him or her that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of his or her objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Company to restrict the processing of his or her Personal Data in certain situations where the Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of the Participant's Personal Data that he or she has actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or his or her employment and is carried out by automated means. In case of concerns, the Participant understands that he or she may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of, the Participant's rights, the Participant understands that he or she should contact his or her local human resources representative.

12. Award Confers No Rights to Continued Employment. Nothing contained in the Plan or this Agreement shall give the Participant the right to be retained in the employment of the Company or any Subsidiary or affect the right of any such employer to terminate the Participant's employment.

13. Severability. If any provision of this Agreement shall be held to be illegal, invalid or unenforceable, that provision will be enforced to the maximum extent permissible and the legality, validity and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

14. Waiver. The Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

15. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

16. Code Section 409A. If the Participant is a "specified employee," within the meaning of Section 409A of the Code and the U.S. Treasury Regulations promulgated thereunder (collectively, "Section 409A"), at the time of a separation from service, any payments made under this Agreement in connection with a separation from service shall instead be paid on the first business day following the expiration of the six (6)-month period following the Participant's separation from service or, if earlier, death of the Participant, if necessary to comply with Section 409A.

It is the intent that the TSR Shares shall comply with the requirements of (or be exempt from the application of) Section 409A, and any ambiguities herein will be interpreted to so comply (or be exempt). The Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify this Agreement as may be necessary to ensure that all vesting or payouts provided under this Agreement are made in a manner that complies with Section 409A or to mitigate any additional tax, interest and/or penalties or other adverse tax consequences that may apply under Section 409A if compliance is not practical; provided, however, that nothing in this paragraph 16 creates an obligation on the part of the Company to modify the terms of this Agreement or the Plan, and the Company makes no representation that the terms of the TSR Shares will comply with (or be exempt from the application of) Section 409A or that payments under the TSR Shares will not be subject to taxes, interest and penalties or other adverse tax consequences under Section 409A. In no event whatsoever shall the Company or any of its Subsidiaries or affiliates be liable to any party for any additional tax, interest or penalties that may be imposed on the Participant by Section 409A or any damages for failing to comply with (or be exempt from the application of) Section 409A.

17. Language. By electing to accept this Award, the Participant acknowledges that he or she is sufficiently proficient in English, or has consulted with an advisor who is sufficiently proficient in English so as to allow the Participant, to understand the terms and conditions of this Agreement. Further, if the Participant has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

18. Insider Trading Restrictions/Market Abuse Laws. The Participant may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and the Participant's country or his or her broker's country, if different, which may affect his or her ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to such shares (*e.g.*, TSR Shares) or rights linked to the value of shares of Common Stock (e.g., Dividend Equivalents) during such times as the Participant is considered to have "inside information" regarding the Company (as defined by any applicable laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders the Participant placed before he or she possessed inside information. Furthermore, the Participant could be prohibited from (i) disclosing the inside information to any third party, which may include fellow employees and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy and under United States law. The Participant is responsible for ensuring compliance with any applicable restrictions and should consult his or her personal legal advisor on this matter.

19. Foreign Asset/Account Reporting Requirements; Exchange Controls. The Participant acknowledges that his or her country may have certain foreign asset and/or account reporting requirements and/or exchange controls that may affect his or her ability to acquire or hold shares of Common Stock or cash received from participating in the Plan (including from any dividends or Dividend Equivalents received or sale proceeds arising from the sale of shares of Common Stock) in a brokerage or bank account outside the Participant's country. The Participant may be required to report such accounts, assets or transactions to the tax or other authorities in his or her country. The Participant also may be required to repatriate sale proceeds or other funds received as a result of his or her participation in the Plan to his or her country through a designated bank or broker and/or within a certain time after receipt. The Participant acknowledges that it is his or her responsibility to be compliant with such regulations, and the Participant is advised to consult his or her personal legal advisor for any details.

20. Appendix. Notwithstanding any provision herein, the Participant's participation in the Plan shall be subject to any additional terms and conditions as set forth in the Appendix for the Participant's country of residence, if any. Moreover, if the Participant relocates to another country, the special terms and conditions for such country will apply to the Participant; to the extent, the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

21. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Participant's participation in the Plan, on the TSR Shares and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

22. Compensation Recovery Policy. This Award and any proceeds, gains or other economic benefit received by the Participant from a subsequent sale of Shares issued under this Award shall be subject to the Company's Compensation Recovery Policy in effect as of the date hereof, as may be amended from time to time to comply with applicable laws (the "Compensation Recovery Policy"). The Participant acknowledges and agrees that no recovery or other action related to this Award pursuant to the Compensation Recovery Policy shall constitute an event that triggers or contributes to any right the Participant may have to resign for "good reason" or "constructive termination" (or similar term) under any compensatory arrangement with the Company or any of its Subsidiaries. The Participant acknowledges and agrees that the Participant's acceptance of this Award shall be deemed to constitute the Participant's acknowledgement of and consent to the Company's application, implementation and enforcement of the Compensation Recovery Policy.

PPG Industries, Inc.

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By:

If I am subject to the PPG Stock Ownership Requirement Policy, I authorize PPG's stock plan administrator to follow PPG's instructions, including but not limited to, instructions to not accept my orders to transact in company stock received upon vesting of this award that are subject to restriction on sale or transfer imposed by PPG in the event that I do not meet the required stock ownership level under PPG's Stock Ownership Requirement Policy, including instructions to not allow shares of company stock received upon vesting of this award to be transferred out of my account with PPG's stock plan administrator. I acknowledge and agree that execution of my orders to transact in or to transfer shares of company stock received upon vesting of this award may be delayed or never occur.

Fidelity Stock Plan Services, LLC, provides recordkeeping and/or administrative services to your company's equity compensation plan, in addition to any services provided directly to the plan by your company or its service providers.

APPENDIX

PPG INDUSTRIES, INC.
GLOBAL TSR SHARE AWARD AGREEMENT
For Participants Located Outside the United States

This Appendix includes special terms and conditions that govern the Award granted to the Participant if the Participant resides in one of the countries listed herein.

If the Participant is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the Company shall, in its sole discretion, determine to what extent the terms and conditions included herein will apply to the Participant.

This Appendix may also include information regarding exchange controls and certain other issues of which the Participant should be aware with respect to his or her participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of November 2023. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Participant not rely on the information noted herein as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time the TSR Shares vest or when the Participant sells shares of Common Stock acquired under the Plan.

In addition, the information is general in nature and may not apply to the Participant's particular situation, and the Company is not in a position to assure him or her of any particular result. Accordingly, the **Participant should seek appropriate professional advice as to how the relevant laws in the Participant's country apply to his or her specific situation.**

If the Participant is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the information contained in this Appendix may not be applicable to him or her.

Capitalized terms used but not defined herein shall have the meanings assigned to them in the Agreement (of which this Appendix is a part) and the Plan.

Mexico

Labor Law Policy and Acknowledgement. In accepting the Award, the Participant expressly recognizes that PPG Industries, Inc., with registered offices at One PPG Place, Pittsburgh, Pennsylvania 15272, U.S.A., is solely responsible for the administration of the Plan and that the Participant's participation in the Plan and acquisition of shares of Common Stock do not constitute an employment relationship between the Participant and PPG Industries, Inc. since the Participant is participating in the Plan on a wholly commercial basis and the Participant's sole Employer is PPG INDUSTRIES de MEXICO S.A. de C.V. or Grupo Comex, S.A. de C.V ("PPG-Mexico"). Based on the foregoing, the Participant expressly recognizes that the Plan and the benefits that the Participant may derive from participating in the Plan do not establish any rights between the Participant and the Employer, PPG-Mexico, and do not form part of the employment conditions and/or benefits provided by PPG-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of the Participant's employment.

The Participant further understands that the Participant's participation in the Plan is as a result of a unilateral and discretionary decision of PPG Industries, Inc.; therefore, PPG Industries, Inc. reserves the absolute right to amend and/or discontinue the Participant's participation at any time without any liability to the Participant.

Finally, the Participant hereby declares that the Participant does not reserve to the Participant any action or right to bring any claim against PPG Industries, Inc. for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and the Participant therefore grants a full and broad release to PPG Industries, Inc., its affiliates, branches, representation offices, its shareholders, directors, officers, agents or legal representatives with respect to any claim that may arise.

Reconocimiento de Ausencia de Relación Laboral y Declaración de la Política. *Aceptando este Premio, el Participante reconoce que PPG Industries, Inc. y sus oficinas registradas en One PPG Place, Pittsburgh, Pennsylvania, U.S.A., es el único responsable de la administración del Plan y que la participación del Participante en el mismo y la adquisición de Acciones no constituye de ninguna manera una relación laboral entre el Participante y PPG Industries, Inc., toda vez que la participación del Participante en el Plan deriva únicamente de una relación comercial con PPG Industries, Inc., reconociendo expresamente que el único empleador del Participante lo es PPG INDUSTRIES de MEXICO S.A. de C.V. o Grupo Comex, S.A. de C.V ("PPG-Mexico"). Derivado de lo anterior, el Participante expresamente reconoce que el Plan y los beneficios que pudieran derivar del mismo no establecen ningún derecho entre el Participante y su empleador, PPG-México, y no forman parte de las condiciones laborales y/o prestaciones otorgadas por PPG-México, y expresamente el Participante reconoce que cualquier modificación al Plan o la terminación del mismo de manera alguna podrá ser interpretada como una modificación de los condiciones de trabajo del Participante.*

Asimismo, el Participante entiende que su participación en el Plan es resultado de la decisión unilateral y discrecional de PPG Industries, Inc., por lo tanto, PPG Industries, Inc. se reserva el derecho absoluto para modificar y/o terminar la participación del Participante en cualquier momento, sin ninguna responsabilidad para el Participante.

Finalmente, el Participante manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de PPG Industries, Inc., por cualquier compensación o daño en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia el Participante otorga un amplio y total finiquito a PPG Industries, Inc., sus Entidades Relacionadas, afiliadas, sucursales, oficinas de representación, sus accionistas, directores, agentes y representantes legales con respecto a cualquier demanda que pudiera surgir.

Switzerland

Securities Law Notice. Because this is a private offering in Switzerland, the TSR Shares are not subject to registration in Switzerland. Neither this document nor any other materials relating to the TSR Shares (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed or otherwise made publicly available in Switzerland to any person other than an employee of the Company or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority (FINMA).

GRANT NOTICE FOR
PERFORMANCE-VESTED RESTRICTED STOCK UNIT AWARD

#GrantDate#

PPG Industries, Inc. (the "Company") and the Participant identified below are parties to a Restricted Stock Unit Award Agreement dated as of #GrantDate+C# and attached to this Grant Notice (the "Agreement"). Capitalized terms used in this Grant Notice shall have the respective meanings given to such terms in the Agreement or in the Plan (as defined in the Agreement), unless otherwise defined in this Grant Notice. This Grant Notice confirms the grant to the Participant of an Award of Restricted Stock Units with the terms set forth below. This Grant Notice is hereby incorporated by reference into and forms a part of the Agreement.

Participant Name:	#ParticipantName#
Date of Grant:	#GrantDate#
Number of Restricted Stock Units Granted:	#QuantityGranted#
Dividend Equivalents:	"Dividend Equivalents" are not granted with respect to this Restricted Stock Unit Award. "Dividend Equivalents" means the right to receive the equivalent value (in cash or shares) of dividends paid on one share of Common Stock for each share that is covered by (but not yet issued under) an Award.
Vesting Date:	#VestDate_1#

Award Period:	[Performance Period]
Award Goals (with linear interpolation in between tiers):	(1) The performance goals for each year in the three-year performance period shall be adjusted earnings per diluted share growth and cash flow return on capital. The performance against each of the performance goals will be calculated annually, and the annual performance against each of the performance goals will be weighted equally over the three-year period and (2) the Participant must be continuously employed by the Company or its Subsidiaries, in good standing (as determined by the Company in its sole discretion), through the Vesting Date (as set forth above), subject to the provisions of the Agreement regarding retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, death and other termination of employment.

Performance Goal	Achievement Level	Award Payment %
Adjusted Earnings per Share Growth		
	< 5.0%	0.0%
	5.0%	50.0%
	6.0%	60.0%
	7.0%	70.0%
	8.0%	80.0%
	9.0%	90.0%
	>= 10.0%	100.0%
Cash Flow Return on Capital		
	< 11.0%	0.0%
	>= 11.0%	100.0%

PPG Industries, Inc.

By: _____

PPG INDUSTRIES, INC.

GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT

#GrantDate#

This GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT (this "Agreement") is entered into as of the date first written above by and between PPG Industries, Inc. (the "Company") and #ParticipantName+C# (the "Participant").

The Company maintains the PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan (as amended from time to time, the "Plan"), which is incorporated into and forms a part of this Agreement, and the Participant has been selected by the Company to receive an Award under the Plan. Capitalized terms used in this Agreement shall, unless defined elsewhere in this Agreement, have the respective meanings given to such terms in the Grant Notice (as defined below) or the Plan.

The Award of Restricted Stock Units shall be confirmed by a separate Grant Notice to which this Agreement is attached (the "Grant Notice"), specifying the Date of Grant of the Award, the number of Restricted Stock Units granted and the Award Goals (as defined in the Grant Notice) applicable to such Restricted Stock Units. Each Restricted Stock Unit is a bookkeeping entry representing the equivalent in value of a share of Common Stock. Such Award shall be subject to the terms and conditions of the Plan and this Agreement. Such Grant Notice shall be deemed incorporated by reference into this Agreement.

NOW, THEREFORE, the Company and the Participant, intending to be legally bound, agree as follows:

1. Terms and Conditions of the Award.

A. This Agreement sets forth the terms and conditions applicable to the Award of Restricted Stock Units confirmed in the Grant Notice. The Award of Restricted Stock Units is made under Article VII of the Plan. Unless and until the Restricted Stock Units are vested in the manner set forth in paragraph 1.P. and 2.A. hereof, the Participant shall have no right to settlement of any such Restricted Stock Units.

B. The Plan is established voluntarily by the Company, is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, except as otherwise expressly provided in the Plan, the Grant Notice and/or this Agreement.

C. The Award is exceptional, voluntary and occasional and does not create any contractual or other right to receive future awards of Restricted Stock Units, or benefits in lieu of Restricted Stock Units even if Restricted Stock Units have been awarded in the past.

D. All decisions with respect to future awards, if any, will be at the sole discretion of the Company.

E. The Participant's participation in the Plan is voluntary.

F. For Participants located outside of the United States, the Restricted Stock Units are an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Company or, if different, the Subsidiary employing the Participant (the "Employer") and the Restricted Stock Units are outside the scope of the Participant's employment contract, if any.

G. The Restricted Stock Units, the underlying shares of Common Stock, and the income and value of same, are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculation of any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Company or any Subsidiary.

H. Neither the award of Restricted Stock Units nor any provision of this Agreement, the Plan, the Grant Notice, or any policies adopted pursuant to the Plan confer upon the Participant any right with respect to employment or continuation of current employment with the Company or any Subsidiary, and in the event that the Participant is not an employee of the Company, the award of Restricted Stock Units shall not be interpreted to form an employment contract or relationship with the Company or any Subsidiary.

I. The future value of the underlying shares of Common Stock is unknown, indeterminable and cannot be predicted with certainty.

J. No claim or entitlement to compensation or damages shall arise from forfeiture of the Award resulting from termination of the Participant's employment (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any).

K. The Committee may terminate the Award at any time on or prior to the Vesting Date (as defined in the Grant Notice) if, in its sole discretion, the Committee determines that the Participant is no longer in a position to have a substantial opportunity to influence the long-term growth of the Company.

L. Prior to settlement of any vested Restricted Stock Units, such Restricted Stock Units will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. The Company's obligations under this Agreement shall be unfunded and unsecured, and no special or separate fund shall be established and no other segregation of assets shall be made and the Participant shall have no greater rights than an unsecured general creditor of the Company. Except as otherwise specifically provided in the Grant Notice or this Agreement, the Participant shall have no rights as a stockholder of the Company by virtue of any Restricted Stock Units granted under this Award unless and until such Award is determined to be vested and resulting shares of Common Stock are issued to the Participant.

M. If the Participant's employment with the Company or any Employer terminates prior to the Vesting Date but, on or after the first anniversary of the Date of Grant because of retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, the Participant shall be entitled to the same payments under the Award to which the Participant would have been entitled had the Participant's employment continued through the Vesting Date, and such Award shall be paid as soon as practicable following the Vesting Date, subject to paragraph 2.C. hereof; provided, however, that the Committee, in its sole discretion, may determine that the Participant will be entitled to a lesser Award.

N. If the Participant's employment with the Company or any Employer terminates prior to the Vesting Date for any reason other than retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, or for any reason before the first anniversary of the Date of Grant, the Participant's Award shall be forfeited on the date of such termination; provided, however, that the Committee, in its sole discretion, may determine that the Participant will be entitled to a full or partial payout with respect to the Award.

O. For purposes of the Award, the Participant's employment or service relationship will be considered terminated as of the date the Participant is no longer actively providing services to the Company or one of its Subsidiaries (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any), and unless otherwise expressly provided in this Agreement, the Plan, the Grant Notice, the Change in Control Agreement, or any offer letter and/or employment agreement referenced herein, or determined by the Company, the Participant's right to vest in the Award under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., the Participant's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any); the Committee shall have the exclusive discretion to determine when the Participant is no longer actively providing services for purposes of the Award (including whether the Participant may still be considered to be providing services while on a leave of absence).

P. The Committee shall determine the extent, if any, to which the applicable Award Goals have been attained and the extent, if any, to which the Award has been earned by the Participant, on or before March 15 following the end of the Award Period (the "Determination Date").

Q. In the event that, during the Change in Control Period (as hereinafter defined), the Participant is subject to an Involuntary Termination (as hereinafter defined), then a number of Restricted Stock Units determined by the Committee, in its sole discretion, but in no event fewer than the number of Restricted Stock Units that would become vested at the "target" level, shall become fully vested, and the payout of the Award shall be made as soon as practicable following the date of the Involuntary Termination, subject to paragraph 2.C. hereof (for avoidance of doubt, the Restricted Stock Units that vest pursuant to this paragraph 1.Q. shall not be subject to the performance and determination procedures contemplated by paragraph 1.P. hereof). The amount of any cash to be paid in lieu of Common Stock, if any, shall be determined using the closing sale price reported on the New York Stock Exchange-Composite Tape for the Common Stock on the date of Involuntary Termination, or if there is no sale on such date, for the nearest preceding date upon which such sale took place. If required to avoid additional taxes, penalties or interest under Section 409A (as determined by the Committee, in its sole discretion), the Company and the Participant shall take all steps necessary (including with regard to post-termination services by the Participant) to ensure that an Involuntary Termination constitutes a "separation from service" within the meaning of Section 409A of the Code, and notwithstanding anything contained herein to the contrary, the date on which a separation from service takes place for reasons resulting in an Involuntary Termination shall be the date of the Involuntary Termination.

If the Participant is a party to a Change in Control Employment Agreement with the Company (a "Change in Control Agreement"), "Change in Control Period" for purposes of this Agreement shall have the meaning ascribed to the term "Employment Period," as defined in the Change in Control Agreement, and if the Participant is not a party to a Change in Control Agreement, the term shall mean the period commencing on the date of a Change in Control (as defined in the Plan) and ending on the earlier of the Participant's date of Retirement and the Vesting Date. "Retirement" for purposes of this paragraph 1.G. shall mean the Participant's termination of employment on or after (i) with respect to a participant in a tax-qualified defined benefit pension plan sponsored by PPG, an Participant's "normal retirement date" as defined in such pension plan, (ii) with respect to any Participant that the Company may subject to compulsory retirement under the Age Discrimination in Employment Act (29 U.S.C. § 621 et. seq.) (ADEA) as a "bona fide executive or a high policy maker," such Participant's "normal retirement date," (iii) with respect to a participant in the PPG Industries Defined Contribution Retirement Plan, the Participant's Social Security normal retirement date, provided that such termination is voluntary, or, (iv) with respect to a participant for whom the provisions in (i) through (iii) are not applicable, the Participant's attainment of age sixty-five (65), provided the termination is a voluntary resignation by the Participant.

"Involuntary Termination" for purposes of this Agreement shall mean, if the Participant is a party to a Change in Control Agreement, a termination of the Participant's employment that gives rise to payments and benefits under Section 6 of the Change in Control Agreement, and if the Participant is not a party to a Change in Control Agreement, shall mean a termination by the Company for any reason other than Cause, death or Disability (as the terms are hereinafter defined). "Cause" for purposes of a Participant who is not a party to a Change in Control Agreement shall have the same meaning as that term is defined in the Participant's offer letter or other applicable employment agreement; or, if there is no such definition, "Cause" means, as determined by the Committee in good faith: (i) engaging in any act, or failing to act, or misconduct that is injurious to the Company or its Subsidiaries; (ii) gross negligence or willful misconduct in connection with the performance of duties; (iii) conviction of (or entering a plea of guilty or *nolo contendere* to) a criminal offense (other than a minor traffic offense); (iv) fraud, embezzlement or misappropriation of funds or property of the Company or a Subsidiary; (v) breach of any material term of any agreement between the Participant and the Company or a Subsidiary relating to employment, consulting or other services, confidentiality, intellectual property or non-competition; (vi) the entry of an order duly issued by any regulatory agency (including federal, state and local regulatory agencies and self-regulatory bodies) having jurisdiction over the Company or a Subsidiary requiring the removal from any office held by the Participant with the Company or prohibiting or materially limiting the Participant from participating in the business or affairs of the Company or any Subsidiary. "Disability" for purposes of this Agreement shall mean disability, which, after the expiration of more than 52 weeks after its commencement, is determined to be total and permanent by a physician selected by the Company or its insurers.

R. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan or sale of the underlying shares of Common Stock.

S. The Participant should consult with his or her own personal tax, legal and financial advisors regarding the Participant's participation in the Plan before taking any action related to the Plan or Restricted Stock Units.

T. Unless otherwise provided in the Plan or by the Company in its discretion, the Award and the benefits evidenced by this Agreement do not create any entitlement to have the Award or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company.

U. Unless otherwise agreed with the Company, the Award, the underlying shares of Common Stock, and the income and value of same, are not granted as consideration for, or in connection with, the service the Participant may provide as a director of any Subsidiary.

V. Neither the Company, the Employer nor any Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the Award or of any amounts due to the Participant pursuant to the vesting/settlement of the Award or the subsequent sale of any shares of Common Stock acquired upon vesting/settlement.

2. Payout on Account of Awards.

A. Upon attainment of the Award Goals and satisfaction of all other applicable conditions as to the issuance of the Restricted Stock Units, and otherwise subject to this Agreement and the terms of the Plan, the Participant shall be entitled to the number of shares of Common Stock constituting the Award as determined by the Committee in accordance with paragraph 1.P hereof. The Participant shall be entitled to receive a payout of the vested Award in the form of cash, shares of Common Stock or a combination of cash and shares, less any Tax-Related Items as defined in paragraph 6, as determined by the Committee in its sole discretion. The amount of any cash to be paid in lieu of Common Stock shall be determined on the basis of the Fair Market Value of the Common Stock as of the Determination Date.

B. Any shares of Common Stock issued to the Participant with respect to his or her Award shall be subject to such restrictions as the Committee may deem advisable under the rules, regulations and other requirements of the U.S. Securities and Exchange Commission, the New York Stock Exchange and any applicable state or foreign securities laws, and the Committee may cause a legend or legends to be endorsed on any stock certificates for such shares making appropriate references to such legal restrictions.

C. Except as otherwise provided in this Agreement, and, for Participants located in the United States, except in the event the Participant is permitted and has made an election to defer payout of the Restricted Stock Units pursuant to the terms and conditions established by the Company, the issuance of the shares of Common Stock (or payment of cash in lieu thereof) in accordance with the provisions of paragraph 1 and this paragraph 2 will be delivered by March 15 of the calendar year following the earlier of (i) the taxable year that includes the last day of the Award Period or, (ii) to the extent applicable under the provisions of paragraph 1.Q. hereof, the date of an Involuntary Termination following a Change in Control. Payout of Restricted Stock Units that have been deferred shall be governed by the terms and conditions of the deferral election form.

3. Continuing Conditions. Notwithstanding any other provisions herein, the Participant, by execution of this Agreement, agrees and acknowledges that in return for the Award granted by the Company in this Agreement, the following continuing conditions shall apply:

A. If at any time prior to the Vesting Date or within one (1) year after the Vesting Date the Participant engages in any activity in competition with any activity of the Company or any of its Subsidiaries, or contrary or harmful to the interests of the Company or any of its Subsidiaries, including, but not limited to: (1) conduct related to the Participant's employment for which either criminal or civil penalties against the Participant may be sought; (2) violation of Company(or Subsidiary) Code of Ethics or similar policy; (3) accepting employment with or serving as a consultant, advisor or in any other capacity to an employer that is in competition with or acting against the interests of the Company or any of its Subsidiaries, including employing or recruiting any present, former or future employee of the Company or any of its Subsidiaries; (4) disclosing or misusing any confidential information or material concerning the Company or any of its Subsidiaries; or (5) participating in a hostile takeover attempt, then this Award shall terminate effective as of the date on which the Participant enters into such activity, unless terminated sooner by operation of another term or condition of this Agreement, and any "Award Gain"

realized by the Participant shall be paid by the Participant to the Company. “Award Gain” shall mean the cash and the Fair Market Value of the Common Stock delivered to the Participant pursuant to paragraph 2 on the date of such delivery times the number of shares so delivered. Any shares of Common Stock deferred by the Participant shall be considered to have been delivered for the purpose of this paragraph 3.

B. By accepting this Agreement, the Participant consents to a deduction from any amounts the Company or any of its Subsidiaries owes the Participant from time to time (including amounts owed the Participant as wages or other compensation, fringe benefits or vacation pay, as well as any other amounts owed to the Participant by the Company or any of its Subsidiaries), to the extent of the amounts payable to the Company by the Participant under paragraph 3.A. above. Whether or not the Company elects to make any set-off in whole or in part, if the Company does not recover by means of set-off the full amount payable by the Participant, calculated as set forth above, the Participant agrees to pay immediately the unpaid balance to the Company.

C. The Participant may be released from the Participant’s obligations under paragraphs 3.A and 3.B above only if the Committee determines, in its sole discretion, that such action is in the best interest of the Company.

4. Award Subject to Plan Provisions. Unless otherwise expressly provided in the Grant Notice or this Agreement, the Restricted Stock Unit Award shall be subject to the provisions of the Plan, including, without limitation, Article XI. In the event of any conflict between this Agreement and either the Grant Notice or the Plan, the Grant Notice or Plan, as applicable, shall control over this Agreement.

5. Applicable Law; Entire Agreement; Venue. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without reference to any choice of law principles. The Grant Notice, this Agreement, the Plan, the Change in Control Agreement, and any offer letter and/or employment agreement referenced herein, contain all terms and conditions with respect to the subject matter hereof.

For purposes of litigating any dispute that arises under the Award or this Agreement, the parties hereby submit to and consent to the jurisdiction of the Commonwealth of Pennsylvania, and agree that such litigation shall be conducted in the courts of Allegheny County, Pennsylvania, or other federal courts for the United States for the Western District of Pennsylvania, where this Award of Restricted Stock Units is made and/or to be performed, and no other courts. The parties agree that, if suit is filed in Allegheny County courts, application will be made by one or both parties, without objection, to have the case heard in the Center for Commercial and Complex Litigation of the Court of Common Pleas of Allegheny County.

6. Taxes. Regardless of any action the Company and/or the Employer take with respect to any or all income tax (including U.S. federal, state, and local tax and/or non-U.S. tax), social insurance, payroll tax, payment on account or other tax-related items related to the Participant’s participation in the Plan and legally applicable to the Participant or deemed by the Company or the Employer to be an appropriate charge to the Participant (“Tax-Related Items”), the Participant acknowledges that the ultimate liability for all Tax-Related Items is and remains the Participant’s responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award, including the grant and vesting of the Restricted Stock Units, the conversion of the Restricted Stock Units into shares or the receipt of an equivalent cash payment, the subsequent sale of any shares acquired pursuant to the Restricted Stock Units and the receipt of any dividends or Dividend Equivalents; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Award to reduce or eliminate the Participant’s liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant has become subject to tax in more than one jurisdiction, the Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax-withholding event, as applicable, the Participant shall pay or make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items.

In this regard, the Participant authorizes the Company and/or the Employer, or their respective agents, to satisfy the Tax-Related Items obligation by one or a combination of the following:

(i) withholding from the proceeds of the sale of shares of Common Stock acquired upon the vesting/settlement of the Award either through a voluntary sale or through a mandatory sale arranged by the Company (on the Participant's behalf pursuant to this authorization); and/or

(ii) withholding from any wages or other cash compensation paid to the Participant by the Company and/or the Employer or from any equivalent cash payment received in connection with the Award; and/or

(iii) withholding in shares of Common Stock to be issued upon settlement of the Restricted Stock Units, provided, however that if the Participant is a Section 16 officer of the Company under the Exchange Act, then the Company may withhold in shares of Common Stock upon the relevant taxable or tax withholding event, as applicable, only if the use of such withholding method is not problematic under applicable tax or securities law or has materially adverse accounting consequences, in which case, the obligation for Tax-Related Items may be satisfied by one or a combination of methods (i) and (ii) above.

The Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates in the Participant's jurisdiction(s). In the event of over-withholding, the Participant may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent in Common Stock or if not refunded, the Participant may seek a refund from the local tax authorities. In the event of under-withholding, the Participant may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Company and/or the Employer. If the obligation for Tax-Related Items is satisfied by withholding a number of shares as described herein, the Participant shall be deemed, for tax purposes only, to have been issued the full number of shares of Common Stock subject to the vested portion of the Award, notwithstanding that a number of shares are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of the Award. The Participant shall pay to the Company and/or the Employer any amount of Tax-Related Items that is required to be withheld or accounted for in connection with the Restricted Stock Units that cannot be satisfied by the means previously described. The Company may refuse to deliver to the Participant any shares of Common Stock pursuant to the Award if the Participant fails to comply with his or her obligations in connection with the Tax-Related Items.

Anything in this paragraph 6 to the contrary notwithstanding, the number of shares of Common Stock subject to Restricted Stock Units that will be permitted to be released and withheld (or sold on the Participant's behalf) to satisfy any Tax-Related Items arising prior to the date the shares are scheduled to be delivered pursuant to paragraph 2.C. hereof for any portion of the Restricted Stock Units that are considered nonqualified deferred compensation subject to Section 409A of the Code shall not exceed the number of shares of Common Stock that equals the liability for the Tax-Related Items.

7. Further Assurances. The Participant agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver and perform all additional documents, instruments and agreements (including, without limitation, stock powers with respect to shares of Common Stock issued or otherwise distributed in relation to this Award) which may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Grant Notice, this Agreement and the Plan.

8. Transfer Restrictions. This Award and the Restricted Stock Units are not transferable other than by will or the laws of descent and distribution, and may not be assigned, hypothecated or otherwise pledged and shall not be subject to execution, attachment or similar process. Upon any attempt to effect any such disposition, or upon the levy of any such process, the Award shall immediately become null and void and the Restricted Stock Units shall be forfeited.

9. Capitalization Adjustments. The number of Restricted Stock Units awarded is subject to adjustment as provided in Section 11.07(a) of the Plan. The Participant shall be notified of such adjustment and such adjustment shall be binding upon the Company and the Participant.

10. Securities Law Compliance. Notwithstanding anything to the contrary contained herein, no shares of Common Stock shall be issued to the Participant upon vesting of this Restricted Stock Unit Award unless the Common Stock is then registered under the Securities Act, or, if such Common Stock is not then so registered, the Company has determined that such vesting and issuance would be exempt from the registration requirements of the Securities Act. Participant's sale of Shares may be subject to any closed trading windows that may be imposed by the Company and must comply with the Company's

insider trading policies (as may be amended from time to time by the Company in its sole discretion) and any other applicable securities laws. The Company's insider trading policy may prohibit Participant from buying or selling Shares. By accepting this Award, the Participant agrees not to sell any of the shares of Common Stock received under this Award at a time when the applicable laws or Company policies prohibit a sale.

11. ***Data Privacy. For Participants outside of the United States:***

Data Privacy Consent. By electing to participate in the Plan via the Company's online acceptance procedure, the Participant is declaring that he or she agrees with the data processing practices described herein and consents to the collection, processing and use of Personal Data (as defined below) by the Company and the transfer of Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other) data protection law perspective, for the purposes described herein.

Declaration of Consent. The Participant understands that he or she needs to review the following information about the processing of his or her personal data by or on behalf of the Company, the Employer and/or any Subsidiary as described in the Agreement and any other Plan materials (the "Personal Data") and declare his or her consent. As regards the processing of the Participant's Personal Data in connection with the Plan and this Agreement, the Participant understands that the Company is the controller of his or her Personal Data.

Data Processing and Legal Basis. The Company collects, uses and otherwise processes Personal Data about the Participant for the purposes of allocating shares of Common Stock and implementing, administering and managing the Plan. The Participant understands that this Personal Data may include, without limitation, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Restricted Stock Units or any other entitlement to shares of stock or equivalent benefits awarded, cancelled, exercised, vested, unvested or outstanding in the Participant's favor. The legal basis for the processing of the Participant's Personal Data, where required, will be his or her consent.

Stock Plan Administration Service Providers. The Participant understands that the Company transfers his or her Personal Data, or parts thereof, to Fidelity Stock Plan Services, LLC (and its affiliated companies), an independent service provider based in the United States which assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participant's Personal Data with such different service provider that serves the Company in a similar manner. The Participant understands and acknowledges that the Company's service provider will open an account for him or her to receive and trade shares of Common Stock acquired under the Plan and that he or she will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of the Participant's ability to participate in the Plan.

International Data Transfers. The Participant understands that the Company and, as of the date hereof, any third parties assisting in the implementation, administration and management of the Plan, such as Fidelity Stock Plan Services, LLC, are based in the United States. The Participant understands and acknowledges that his or her country may have enacted data privacy laws that are different from the laws of the United States. The Company's legal basis for the transfer of the Participant's Personal Data is his or her consent.

Data Retention. The Participant understands that the Company will use his or her Personal Data only as long as is necessary to implement, administer and manage his or her participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, the Participant understands and acknowledges that the Company's legal basis for the processing of his or her Personal Data would be compliance with the relevant laws or regulations. When the Company no longer needs the Participant's Personal Data for any of the above purposes, the Participant understands the Company will remove it from its systems.

***Voluntariness and Consequences of Denial/Withdrawal of Consent**. The Participant understands that his or her participation in the Plan and his or her consent is purely voluntary. The Participant may deny or later withdraw his or her consent at any time, with future effect and for any or no reason. If the Participant denies or later withdraws his or her consent, the Company can no longer offer the Participant participation in the Plan or offer other equity awards to the Participant or administer or maintain such awards and the Participant would no longer be able to participate in the Plan. The Participant further understands that denial or withdrawal of his or her consent would not affect his or her status or salary as an employee or his or her career and that the Participant would merely forfeit the opportunities associated with the Plan.*

***Data Subject Rights**. The Participant understands that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where the Participant is based and subject to the conditions set out in the applicable law, the Participant may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Company holds about him or her and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about him or her that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of his or her objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Company to restrict the processing of his or her Personal Data in certain situations where the Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of the Participant's Personal Data that he or she has actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or his or her employment and is carried out by automated means. In case of concerns, the Participant understands that he or she may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of, the Participant's rights, the Participant understands that he or she should contact his or her local human resources representative.*

12. Severability. If any provision of this Agreement shall be held to be illegal, invalid or unenforceable, that provision will be enforced to the maximum extent permissible and the legality, validity and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

13. Waiver. The Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

14. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

15. Code Section 409A. If the Participant is a "specified employee," within the meaning of Section 409A of the Code and the U.S. Treasury Regulations promulgated thereunder (collectively, "Section 409A"), at the time of a separation from service, any payments made under this Agreement in connection with a separation from service shall instead be paid on the first business day following the expiration of the six (6)-month period following the Participant's separation from service or, if earlier, death of the Participant, if necessary to comply with Section 409A.

It is the intent that the terms of the Restricted Stock Units shall comply with the requirements of (or be exempt from the application of) Section 409A, and any ambiguities herein will be interpreted to so comply (or be exempt). The Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify this Agreement as may be necessary to ensure that all vesting or payouts provided under this Agreement are made in a manner that complies

with Section 409A or to mitigate any additional tax, interest and/or penalties or other adverse tax consequences that may apply under Section 409A if compliance is not practical; provided, however, that nothing in this paragraph 15 creates an obligation on the part of the Company to modify the terms of this Agreement or the Plan, and the Company makes no representation that the terms of the Restricted Stock Units under this Award Agreement will comply with (or be exempt from the application of) Section 409A or that payments under the Restricted Stock Units will not be subject to taxes, interest and penalties or other adverse tax consequences under Section 409A. In no event whatsoever shall the Company or any of its Subsidiaries or affiliates be liable to any party for any additional tax, interest or penalties that may be imposed on the Participant by Section 409A or any damages for failing to comply with (or be exempt from the application of) Section 409A.

16. Language. By electing to accept this Award, the Participant acknowledges that he or she is sufficiently proficient in English, or has consulted with an advisor who is sufficiently proficient in English so as to allow the Participant, to understand the terms and conditions of this Agreement. Further, if the Participant has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

17. Insider Trading Restrictions/Market Abuse Laws. The Participant may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and the Participant's country or his or her broker's country, if different, which may affect his or her ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to such shares (e.g., Restricted Stock Units) or rights linked to the value of shares of Common Stock (e.g., Dividend Equivalents) during such times as the Participant is considered to have "inside information" regarding the Company (as defined by any applicable laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders the Participant placed before he or she possessed inside information. Furthermore, the Participant could be prohibited from (i) disclosing the inside information to any third party, which may include fellow employees and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy and under United States law. The Participant is responsible for ensuring compliance with any applicable restrictions and should consult his or her personal legal advisor on this matter.

18. Foreign Asset/Account Reporting Requirements; Exchange Controls. The Participant acknowledges that his or her country may have certain foreign asset and/or account reporting requirements and/or exchange controls that may affect his or her ability to acquire or hold shares of Common Stock or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of shares of Common Stock) in a brokerage or bank account outside the Participant's country. The Participant may be required to report such accounts, assets or transactions to the tax or other authorities in his or her country. The Participant also may be required to repatriate sale proceeds or other funds received as a result of his or her participation in the Plan to his or her country through a designated bank or broker and/or within a certain time after receipt. The Participant acknowledges that it is his or her responsibility to be compliant with such regulations, and the Participant is advised to consult his or her personal legal advisor for any details.

19. Appendix. Notwithstanding any provision herein, the Participant's participation in the Plan shall be subject to any additional terms and conditions as set forth in the Appendix for the Participant's country of residence, if any. Moreover, if the Participant relocates to another country, the terms and conditions for such country will apply to the Participant, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

20. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Participant's participation in the Plan, on the Restricted Stock Units and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

21. Compensation Recovery Policy. This Award and any proceeds, gains or other economic benefit received by the Participant from a subsequent sale of Shares issued under this Award shall be subject to the Company's Compensation Recovery Policy in effect as of the date hereof, as may be amended from time to time to comply with applicable laws (the "Compensation Recovery Policy"). The Participant

acknowledges and agrees that no recovery or other action related to this Award pursuant to the Compensation Recovery Policy shall constitute an event that triggers or contributes to any right the Participant may have to resign for "good reason" or "constructive termination" (or similar term) under any compensatory arrangement with the Company or any of its Subsidiaries. The Participant acknowledges and agrees that the Participant's acceptance of this Award shall be deemed to constitute the Participant's acknowledgement of and consent to the Company's application, implementation and enforcement of the Compensation Recovery Policy.

22. Stock Ownership Requirements. If Participant is subject to the PPG Stock Ownership Requirement Policy, the Participant authorizes the Company's stock plan administrator to follow the Company's instructions, including but not limited to, instructions to not accept the Participant's orders to transact in Common Stock received upon vesting/settlement of this Award that are subject to restriction on sale or transfer imposed by the Company in the event that the Participant does not meet the required stock ownership level under PPG's Stock Ownership Requirement Policy, including instructions to not allow shares of Common Stock received upon vesting/settlement of this Award to be transferred out of the Participant's account with the Company's stock plan administrator. The Participant acknowledges and agrees that execution of the Participant's orders to transact in or to transfer shares of Common Stock received upon vesting/settlement of this Award may be delayed or never occur.

PPG Industries, Inc.

_____

By:

Fidelity Stock Plan Services, LLC, provides recordkeeping and/or administrative services to your company's equity compensation plan, in addition to any services provided directly to the plan by your company or its service providers.

APPENDIX
PPG INDUSTRIES, INC.
GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT
For Participants Located Outside the United States

This Appendix includes special terms and conditions that govern the Award granted to the Participant if the Participant resides in one of the countries listed herein.

If the Participant is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the Company shall, in its sole discretion, determine to what extent the terms and conditions included herein will apply to the Participant.

This Appendix may also include information regarding exchange controls and certain other issues of which the Participant should be aware with respect to his or her participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of November 2023. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Participant not rely on the information noted herein as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time the Restricted Stock Units vest or when the Participant sells shares of Common Stock acquired under the Plan.

In addition, the information is general in nature and may not apply to the Participant's particular situation, and the Company is not in a position to assure him or her of any particular result. **Accordingly, the Participant should seek appropriate professional advice as to how the relevant laws in the Participant's country apply to his or her specific situation.**

If the Participant is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the information contained in this Appendix may not be applicable to him or her.

Capitalized terms used but not defined herein shall have the meanings assigned to them in the Agreement (of which this Appendix is a part) and the Plan.

Argentina

Acknowledgement of Nature of Plan and Award. The following provision supplements the Terms and Conditions of the Award paragraph of the Agreement:

In accepting the grant of the Award, the Participant acknowledges and agrees that the grant of the Award is made by the Company (not the Employer) in its sole discretion and that the value of any Awards or shares of Common Stock acquired under the Plan shall not constitute salary or wages for any purpose under Argentine labor law, including the calculation of (i) any labor benefits including, but not limited to, vacation pay, thirteenth salary, compensation in lieu of notice, annual bonus, disability, and leave of absence payments, or (ii) any termination or severance indemnities. If, notwithstanding the foregoing, any benefits under the Plan are considered for purposes of calculating any termination or severance indemnities, the Participant acknowledges and agrees that such benefits shall not accrue more frequently than on an annual basis.

Securities Law Notice. Neither the Restricted Stock Units nor the underlying shares of Common Stock are publicly offered or listed on any stock exchange in Argentina.

Australia

Australian Offer Document. This offer is being made under Division 1A, Part 7.12 of the Corporations Act 2001 (Cth). Please note that if the Participant offers the shares of Common Stock acquired under the Plan for sale to a person or entity resident in Australia, the offer may be subject to disclosure requirements under Australian law. The Participant agrees to obtain legal advice on the Participant's disclosure obligations prior to making any such offer.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies to Restricted Stock Units granted under the Plan, such that the Restricted Stock Units are intended to be subject to deferred taxation.

Austria

There are no country-specific provisions.

Belgium

Foreign Asset/Account / Exchange Control Reporting Information. Belgian residents are required to report any securities and bank or brokerage accounts held outside of Belgium on their annual tax return. In a separate report, Belgian residents are required to provide the National Bank of Belgium with the account details of any such foreign accounts (including the account number, bank name and country in which any such account was opened). This report, as well as additional information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under the Kredietcentrales / Centrales des crédits caption.

Annual Securities Account Tax. If the total average value of securities held in a Belgian or foreign securities account exceeds EUR 1 million, an "annual securities accounts tax" applies. Belgian residents should consult with their personal tax advisor regarding the tax.

Brazil

Compliance with the Law. In accepting the grant of the Restricted Stock Units, the Participant acknowledges his or her agreement to comply with applicable Brazilian laws and to pay any and all applicable tax associated with the Restricted Stock Units and the sale of the shares of Common Stock acquired under the Plan and the receipt of any dividends or Dividend Equivalents.

Terms and Conditions of the Award. This provision supplements paragraph 1 of the Agreement:

By accepting the Restricted Stock Units, the Participant agrees that (i) the Participant is making an investment decision, and (ii) the value of the underlying shares of Common Stock is not fixed and may increase or decrease over the vesting and holding periods without compensation to the Participant.

Tax on Financial Transactions (IOF). If the Participant repatriates amounts from the sale of shares of Common Stock or any dividends received on such shares of Common Stock into Brazil, the Participant may be subject to a Tax on Financial Transactions when funds are converted from USD to BRL. The Participant agrees that the Participant will be solely responsible for such Tax on Financial Transactions.

Canada

Restricted Stock Units Payable Only in Shares of Common Stock. Notwithstanding any discretion contained in Section 7.03(a) of the Plan or anything in the Agreement to the contrary, the grant of Restricted Stock Units does not provide any right for the Participant to receive a cash payment and the Restricted Stock Units are payable in shares of Common Stock only.

Termination of Vesting. This provision supplements paragraph 1. O. of the Agreement:

Notwithstanding the foregoing, if applicable employment standards legislation explicitly requires continued participation in the Plan during a statutory notice period, the Participant acknowledges that his or her right to participate in the Plan, if any, will terminate effective as of the last day of his or her minimum statutory notice period, but the Participant will not earn or be entitled to any pro-rated vesting if the vesting date falls after the end of his or her statutory notice period, nor will the Participant be entitled to any compensation for lost vesting.

Securities Law Notice. The Participant is permitted to sell shares of Common Stock acquired under the Plan, provided the resale of such shares of Common Stock takes place outside of Canada through the facilities of a stock exchange on which the Company's Common Stock is listed. The Company's Common Stock is currently traded on the New York Stock Exchange which is located outside of Canada, under the ticker symbol "PPG" and shares of Common Stock acquired under the Plan may be sold through this exchange.

The following provisions will apply to the Participant if he or she is a resident of Quebec:

Language. A French translation of the Agreement and the Plan will be made available to the Participant. The Participant understands that, from time to time, additional information related to the Plan might be provided in English and such information may not be immediately available in French. However, upon request, the Company will translate into French documents related to the Plan as soon as reasonably practicable. Notwithstanding anything to the contrary in the Agreement, and unless the Participant indicates otherwise, the French translation of the Agreement and the Plan will govern the Participant's participation in the Plan.

Data Privacy. This provision supplements the Data Privacy paragraph of the Agreement:

The Participant hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. The Participant further authorizes the Company, any Subsidiary, and the administrator of the Plan to disclose and discuss the Plan with their advisors. The Participant acknowledges and agrees that their personal information, including sensitive personal information, may be transferred or disclosed outside the Province of Quebec, including to the United States. The Participant authorizes the Company and any Subsidiary to record such information and to keep such information in their employee file. The Participant also acknowledges and authorizes the Company and other parties involved in the administration of the Plan to use technology for profiling purposes and to make automated decisions that may have an impact on the Participant or the administration of the Plan.

Chile

Securities Law Notice. This offer conforms to general ruling N°336 of the Chilean Commission for the Financial Market ("CMF"). The offer deals with securities not registered in the registry of securities or in the registry of foreign securities of the CMF, and therefore such securities are not subject to its oversight. The issuer is not obligated to provide public information in Chile regarding the foreign securities, since such securities are not registered with the CMF. The securities shall not be subject to public offering as long as they are not registered with the corresponding registry of securities in Chile, unless they fulfill the requirements set forth in general ruling N°336 of the CMF.

China

Termination of Employment. The Participant understands and agrees that, if he or she is subject to exchange control laws and regulations in the People's Republic of China ("PRC") (as determined by the Company in its sole discretion), paragraph 1.M. of the Agreement is deleted in its entirety and replaced with the following provision:

M. If the Participant's employment with the Company, the Employer or any Subsidiary terminates prior to the Vesting Date but, on or after the first anniversary of the Date of Grant because of retirement, disability or job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, the Participant shall be entitled to the same Award to which the Participant would have been entitled had the Participant's employment continued through the Vesting Date, and such Award shall be paid as soon as practicable following the Vesting Date, subject to paragraph 2.C.; provided, however, that the Committee, in its sole discretion, may determine that the Participant will be entitled to a lesser Award. Notwithstanding the foregoing, if the Payout Date (as defined in paragraph 2.C.) is more than six (6) months after the termination date, the Participant shall surrender all unvested Restricted Stock Units and, in exchange therefore, the Participant will receive a cash payment equal in value to the Award to which the Participant would have been entitled had the Participant's employment continued through the Vesting Date, and such cash payment shall be paid as soon as practicable following the Participant's termination date. For purposes of the foregoing, the amount of any cash to be paid in lieu of Common Stock shall be determined on the basis of the Fair Market Value of the Common Stock as of the date on which it is paid.

Exchange Control Restrictions. To facilitate compliance with any applicable laws or regulations in the PRC, the Participant agrees to the sale of any shares of Common Stock to be issued upon vesting and settlement of the Award. The sale will occur (i) immediately upon vesting and settlement of the Award, (ii) following the Participant's termination of employment with the Employer, the Company or a Subsidiary, or

(iii) within any other time frame as the Company determines to be necessary to facilitate compliance with local regulatory requirements. The Participant further agrees that the Company is authorized to instruct its designated broker to assist with the mandatory sale of such shares (on the Participant's behalf pursuant to this authorization) and the Participant expressly authorizes the Company's designated broker to complete the sale of such shares. The Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the shares at any particular price. Upon the sale of the shares, the Company agrees to pay the Participant the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy Tax-Related Items. The Participant agrees that the payment of the cash proceeds will be subject to the repatriation requirements described below.

The Participant further agrees that any shares to be issued to the Participant shall be deposited directly into an account with the Company's designated broker. The deposited shares shall not be transferable (either electronically or in certificate form) from the brokerage account. This limitation shall apply both to transfers to different accounts with the same broker and to transfers to other brokerage firms. The limitation shall apply to all shares issued to the Participant under the Plan, whether or not the Participant continues to be employed by the Company or one of its Subsidiaries. If the Participant sells shares issued upon vesting and settlement of the Award, the repatriation requirements described below shall apply.

The Participant understands and agrees that, if he or she is subject to exchange control laws and regulations in the PRC (as determined by the Company in its sole discretion), the Participant will be required to repatriate the proceeds from the sale of shares of Common Stock and any dividends or Dividend Equivalents received in relation to the shares to the PRC. The Participant further understands that, under local law, such repatriation of his or her cash proceeds may need to be effectuated through a special exchange control account established by the Company, a Subsidiary or the Employer, and the Participant hereby consents and agrees that any proceeds from the sale of any shares, dividends or Dividend Equivalents the Participant receives may be transferred to such special account prior to being delivered to the Participant. The Participant also agrees to sign any agreements, forms and/or consents that may be reasonably requested by the Company (or the Company's designated brokerage firm) to effectuate such transfers and shall otherwise cooperate with the Company with respect to exchange control matters. The proceeds may be paid to the Participant in U.S. dollars or local currency at the Company's discretion. If the proceeds are paid to the Participant in U.S. dollars, the Participant understands that he or she will be required to set up a U.S. dollar bank account in China so that the proceeds may be deposited into this account. If the proceeds are paid to the Participant in local currency, the Participant acknowledges that the Company is under no obligation to secure any particular exchange conversion rate and that the Company may face delays in converting the proceeds to local currency due to exchange control restrictions. The Participant agrees that, if required by the Company, he or she will bear any currency fluctuation risk between the time the proceeds are received and the time (i) the Tax-Related Items are converted to local currency and remitted to the tax authorities and/or (ii) the net proceeds are converted to local currency and distributed to the Participant. The Participant further agrees to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

Colombia

Labor Law Acknowledgement. By accepting the Award, the Participant acknowledges that pursuant to Article 128 of the Colombia Labor Code, the Plan and related benefits do not constitute a component of "salary" for any purposes. To this extent, the Participant understands they will not be included and/or considered for purposes of calculating any and all labor benefits, such as legal/fringe benefits, vacations, indemnities, payroll taxes, social insurance contributions and/or any other labor-related amount that may be payable.

Securities Law Notice. The shares of Common Stock are not and will not be registered in the Colombian registry of publicly traded securities (Registro Nacional de Valores y Emisores) and therefore the shares may not be offered to the public in Colombia. Nothing in this document should be construed as the making of a public offer of securities in Colombia.

Costa Rica

There are no country-specific provisions.

Czech Republic

There are no country-specific provisions.

Denmark

Danish Stock Option Act. By accepting this Award, the Participant acknowledges that he or she has received a Danish translation of an Employer Statement, which includes a description of the treatment applicable to the Restricted Stock Units upon a Termination, as required by the Danish Act on the Use of Rights to Purchase or Subscribe for Shares etc. in Employment Relationships (the "Stock Option Act"), to the extent the Stock Option Act applies to the Restricted Stock Units. The Employer Information Statement is accessible in the Document Library section of the Fidelity Stock Plan Services, LLC website at www.fidelity.com.

Egypt

There are no country-specific provisions.

Estonia

There are no country-specific provisions.

Finland

There are no country-specific provisions.

France

Language Consent. By clicking on the "I accept" button or by signing and returning this document providing for the terms and conditions of the grant, the Participant confirms having read and understood the documents relating to this grant (the Plan and this Agreement) which were provided to the Participant in the English language. The Participant accepts the terms of those documents accordingly.

En cliquant sur le bouton "J'accepte" ou en signant et renvoyant le présent document décrivant les termes et conditions de cette attribution, le Participant confirme avoir lu et compris les documents relatifs à cette attribution (le Plan et ce Contrat) qui ont été communiqués au Participant en langue anglaise. Le Participant en accepte les termes en connaissance de cause.

Germany

Foreign Asset / Account Reporting Information. German residents holding shares of Common Stock must notify their local tax office of the acquisition of Common Stock when they file their tax returns for the relevant year if the resident holds at least 1% of the Company and the value of the shares for all Common Stock acquired exceeds EUR 150,000 or the resident holds Common Stock exceeding 10% of the Company's total Common Stock.

Greece

There are no country-specific provisions.

Guatemala

There are no country-specific provisions.

Hong Kong

Securities Law Notice. The grant of an Award and the shares of Common Stock to be issued upon settlement of an Award do not constitute a public offer of securities and are available only to employees of the Company or a Subsidiary or affiliate.

WARNING: The Participant should be aware that the contents of the Agreement, including this Appendix, and the Plan and other incidental communication materials have not been prepared in accordance with and are not intended to constitute a “prospectus” for a public offering of securities under the applicable securities legislation in Hong Kong nor have the documents been reviewed by any regulatory authority in Hong Kong. The Restricted Stock Units are intended only for the personal use of each eligible employee of the Company, its Subsidiaries and affiliates and may not be distributed to any other person. If the Participant is in any doubt about any of the contents of the Agreement, including this Appendix, or the Plan, the Participant should obtain independent professional advice.

Occupational Retirement Schemes Ordinance Notification. The Company specifically intends that the Plan will not be an occupational retirement scheme for purposes of the Occupational Retirement Schemes Ordinance.

Hungary

There are no country-specific provisions.

India

Exchange Control Notice. The Participant must repatriate any proceeds from the sale of shares of Common Stock or the receipt of dividends paid on such shares of Common Stock to India within such period of time as may be required under applicable regulations. The Participant should obtain evidence of the repatriation of funds in the form of a foreign inward remittance certificate (“FIRC”) from the bank where the Participant deposits the foreign currency. The Participant should maintain the FIRC as evidence of the repatriation of funds in the event the Reserve Bank of India or the Employer requests proof of repatriation. The Participant is also responsible for complying with any other exchange control laws in India that may apply to the Restricted Stock Units or the shares of Common Stock acquired under the Plan.

Indonesia

Language Consent and Notification. By accepting the Restricted Stock Units, the Participant (i) confirms having read and understood the documents relating to the grant (i.e., the Plan and the Agreement) which were provided in the English language, (ii) accepts the terms of those documents accordingly, and (iii) agrees not to challenge the validity of this document based on Law No. 24 of 2009 on National Flag, Language, Coat of Arms and National Anthem or the implementing Presidential Regulation (when issued).

Persetujuan dan Pemberitahuan Bahasa. *Dengan menerima pemberian Unit Saham Terbatas ini, Peserta (i) memberikan konfirmasi bahwa dirinya telah membaca dan memahami dokumen-dokumen berkaitan dengan pemberian ini (Pemberitahuan Pemberian, Perjanjian Penghargaan dan Program) yang disediakan dalam Bahasa Inggris, (ii) menerima persyaratan di dalam dokumen-dokumen tersebut, dan (iii) setuju untuk tidak mengajukan keberatan atas keberlakuan dari dokumen ini berdasarkan Undang-Undang No. 24 Tahun 2009 tentang Bendera, Bahasa dan Lambang Negara serta Lagu Kebangsaan ataupun Peraturan Presiden sebagai pelaksanaannya (ketika diterbitkan).*

Italy

Plan Document Acknowledgement. In accepting the Award, the Participant acknowledges that the Participant has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix.

The Participant further acknowledges that the Participant has read and specifically and expressly approves the following paragraphs of the Agreement: Terms and Conditions of the Award; Applicable Law; Entire Agreement; Venue; Taxes; Electronic Delivery and Acceptance; Data Privacy; Language; Imposition of Other Requirements and Appendix.

Japan

Exchange Control Notice. If the Participant acquires shares valued at more than JPY 100 million in a single transaction, the Participant must file a Securities Acquisition Report with the Ministry of Finance through the Bank of Japan within 20 days after the acquisition of the shares.

Kazakhstan

Securities Law Notice. This offer is addressed only to certain eligible employees in the form of shares of Common Stock to be issued by the Company. The Plan and the Agreement have not been approved, nor do they need to be approved, by the National Bank of Kazakhstan. The offer is intended only for the original recipient and is not for general circulation in the Republic of Kazakhstan.

Latvia

There are no country-specific provisions.

Lithuania

There are no country-specific provisions.

Malaysia

Data Privacy Notice. Notwithstanding any provision of the Agreement, this paragraph in the Appendix applies in regards to data privacy in Malaysia.

The Participant hereby explicitly, voluntarily and unambiguously consents to the collection, use and transfer, in electronic or other form, of his or her personal data as described in this Agreement and any other Plan participation materials by and among, as applicable, the Employer, the Company and any Subsidiary or any third parties authorized by same in assisting in the implementation, administration and management of the Participant's participation in the Plan. The Participant may have previously provided the Company and the Employer with, and the Company and the Employer may hold, certain personal information about the Participant, including, but not limited to, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, the fact and conditions of the Participant's participation in the Plan, details of all Restricted Stock Units or any other entitlement to shares of stock awarded, cancelled,	Pesertadengan ini secara eksplisit, secara sukarela dan tanpa sebarang keraguan mengizinkan pengumpulan, penggunaan dan pemindahan, dalam bentuk elektronik atau lain-lain, data peribadinya seperti yang dinyatakan dalam Perjanjia ini dan apa-apa bahan Pelan penyertaan oleh dan di antara Majikan, Syarikat dan mana-mana Syarikat Induk atau Anak Syarikat atau mana-mana pihak ketiga yang diberi kuasa oleh yang sama untuk membantu dalam pelaksanaan, pentadbiran dan pengurusan penyertaan Peserta dalam Pelan tersebut. Sebelum ini, Peserta mungkin telah membekalkan Syarikat dan Majikan dengan, dan Syarikat dan Majikan mungkin memegang, maklumat peribadi tertentu tentang Peserta, termasuk, tetapi tidak terhad kepada, namanya, alamat rumah dan nombor telefon, alamat emal, tarikh lahir, nombor insurans sosial, pasport atau nombor pengenalan lain, gaji, kewarganegaraan, jawatan, apa-apa saham atau jawatan pengarah yang dipegang dalam Syarikat, fakta dan syarat-syarat penyertaan

exercised, vested, unvested or outstanding in the Participant's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan.

The Participant also authorizes any transfer of Data, as may be required, to such stock plan service provider as may be selected by the Company from time to time, which is assisting the Company with the implementation, administration and management of the Plan and/or with whom any shares of Common Stock acquired upon settlement of the Restricted Stock Units are deposited. The Participant acknowledges that these recipients may be located in the Participant's country or elsewhere, and that the recipient's country (e.g., the United States) may have different data privacy laws and protections to the Participant's country, which may not give the same level of protection to Data. The Participant understands that he or she may request a list with the names and addresses of any potential recipients of Data by contacting his or her local human resources representative. The Participant authorizes the Company, the stock plan service provider and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Participant's participation in the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purpose of implementing, administering and managing Participant's participation in the Plan. Participant understands that Data will be held only as long as is necessary to implement, administer and manage his or her participation in the Plan. The Participant understands that he or she may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case, without cost, by contacting in writing his or her local human resources representative, whose contact details are [insert]. Further, the Participant understands that he or she is providing the consents herein on a purely voluntary basis. If the Participant does not consent, or if the Participant later seeks to revoke the consent, his or her employment status or service and career with the Employer will not be adversely affected; the only adverse consequence of refusing or withdrawing the consent is that the Company would not be able to grant future Restricted Stock Units or other equity awards to the Participant or administer or maintain such awards. Therefore, the Participant understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan. For more information on the consequences of the refusal to consent or withdrawal of consent, the Participant understands that he or she may contact his or her local human resources representative.

Peserta dalam Pelan tersebut, butir-butir semua Unit-unit Saham Terbatas atau apa-apa hak lain untuk saham yang dianugerahkan, dibatalkan, dilaksanakan, terletak hak, tidak diletak hak ataupun bagi faedah Peserta ("Data"), untuk tujuan yang eksklusif bagi melaksanakan, mentadbir dan menguruskan Pelan tersebut.

Peserta juga memberi kuasa untuk membuat apa-apa pemindahan Data, sebagaimana yang diperlukan, kepada pembekal perkhidmatan pelan saham yang lain sebagaimana yang dipilih oleh Syarikat dari semasa ke semasa, yang membantu Syarikat dalam pelaksanaan, pentadbiran dan pengurusan Pelan dan/atau dengan sesiapa yang mendepositkan Saham-Saham yang diperolehi melalui penyelesaian Unit-unit Saham Terbatas. Peserta mengakui bahawa penerima-penerima ini mungkin berada di negara Peserta atau di tempat lain, dan bahawa negara penerima (contohnya, Amerika Syarikat) mungkin mempunyai undang-undang privasi data dan perlindungan yang berbeza daripada negara Peserta, yang mungkin tidak boleh memberi tahap perlindungan yang sama kepada Data. Pesertafaham bahawa dia boleh meminta senarai nama dan alamat mana-mana penerima Data dengan menghubungi wakil sumber manusia tempatannya . Peserta memberi kuasa kepada Syarikat, pembekal perkhidmatan pelan saham dan mana-mana penerima lain yang mungkin membantu Syarikat (masa sekarang atau pada masa depan) untuk melaksanakan, mentadbir dan menguruskan penyertaan Peserta dalam Pelan tersebut untuk menerima, memiliki, menggunakan, mengekalkan dan memindahkan Data, dalam bentuk elektronik atau lain-lain, semata-mata dengan tujuan untuk melaksanakan, mentadbir dan menguruskan penyertaan Peserta dalam Pelan tersebut. Peserta faham bahawa Data akan dipegang hanya untuk tempoh yang diperlukan untuk melaksanakan, mentadbir dan menguruskan penyertaannya dalam Pelan tesebut. Peserta faham bahawa dia boleh, pada bila-bila masa, melihat data, meminta maklumat tambahan mengenai penyimpanan dan pemprosesan Data, meminta bahawa pindaan-pindaan dilaksanakan ke atas Data atau menolak atau menarik balik persetujuan dalam ini, dalam mana-mana kes, tanpa kos, dengan menghubungi secara bertulis wakil sumber manusia tempatannya , di mana butir-butir hubungannya adalah, [insert]. Selanjutnya, Peserta memahami bahawa dia memberikan persetujuan di sini secara sukarela. Jika Peserta tidak bersetuju, atau jika Peserta kemudian membatalkan persetujuannya, status pekerjaan atau perkhidmatan dan kerjayanya dengan Majikan tidak akan terjejas; satunya akibat buruk jika dia tidak bersetuju atau menarik balik persetujuannya adalah bahawa Syarikat tidak akan dapat memberikan Unit-unit Saham Terbatas pada

	masa depan atau anugerah ekuiti lain kepada Peserta atau mentadbir atau mengekalkan anugerah-anugerah tersebut. Oleh itu, Peserta faham bahawa keengganan atau penarikan balik persetujuannya boleh menjejaskan keupayaannya untuk mengambil bahagian dalam Pelan tesebut. Untuk maklumat lanjut mengenai akibat keengganan untuk memberikan keizinan atau penarikan balik keizinan, Peserta fahami bahawa dia boleh menghubungi wakil sumber manusia tempatannya .

Director Notification Obligation. If the Participant is a director of the Company's Malaysian Subsidiary, the Participant is subject to certain notification requirements under the Malaysian Companies Act. Among these requirements is an obligation to notify the Malaysian Subsidiary in writing when the Participant receives or disposes of an interest (e.g., Restricted Stock Units, shares of Common Stock) in the Company or any related company. Such notifications must be made within 14 days of receiving or disposing of any interest in the Company or any related company.

Mexico

Labor Law Policy and Acknowledgement. In accepting the Award, the Participant expressly recognizes that PPG Industries, Inc., with registered offices at One PPG Place, Pittsburgh, Pennsylvania 15272, U.S.A., is solely responsible for the administration of the Plan and that the Participant's participation in the Plan and acquisition of shares of Common Stock do not constitute an employment relationship between the Participant and PPG Industries, Inc. since the Participant is participating in the Plan on a wholly commercial basis and the Participant's sole Employer is PPG INDUSTRIES de MEXICO S.A. de C.V. or Grupo Comex, S.A. de C.V ("PPG-Mexico"). Based on the foregoing, the Participant expressly recognizes that the Plan and the benefits that the Participant may derive from participating in the Plan do not establish any rights between the Participant and the Employer, PPG-Mexico, and do not form part of the employment conditions and/or benefits provided by PPG-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of the Participant's employment.

The Participant further understands that the Participant's participation in the Plan is as a result of a unilateral and discretionary decision of PPG Industries, Inc.; therefore, PPG Industries, Inc. reserves the absolute right to amend and/or discontinue the Participant's participation at any time without any liability to the Participant.

Finally, the Participant hereby declares that the Participant does not reserve to the Participant any action or right to bring any claim against PPG Industries, Inc. for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and the Participant therefore grants a full and broad release to PPG Industries, Inc., its affiliates, branches, representation offices, its shareholders, directors, officers, agents or legal representatives with respect to any claim that may arise.

Reconocimiento de Ausencia de Relación Laboral y Declaración de la Política. *Aceptando este Premio, el Participante reconoce que PPG Industries, Inc. y sus oficinas registradas en One PPG Place, Pittsburgh, Pennsylvania, U.S.A., es el único responsable de la administración del Plan y que la participación del Participante en el mismo y la adquisición de Acciones no constituye de ninguna manera una relación laboral entre el Participante y PPG Industries, Inc., toda vez que la participación del Participante en el Plan deriva únicamente de una relación comercial con PPG Industries, Inc., reconociendo expresamente que el único empleador del Participante lo es PPG INDUSTRIES de MEXICO S.A. de C.V. o Grupo Comex, S.A. de C.V ("PPG-Mexico"). Derivado de lo anterior, el Participante expresamente reconoce que el Plan y los beneficios que pudieran derivar del mismo no establecen ningún derecho entre el Participante y su empleador, PPG-México, y no forman parte de las condiciones laborales y/o prestaciones otorgadas por PPG-México, y expresamente el Participante reconoce que cualquier modificación al Plan o la terminación del mismo de manera alguna podrá ser interpretada como una modificación de los condiciones de trabajo del Participante.*

Asimismo, el Participante entiende que su participación en el Plan es resultado de la decisión unilateral y discrecional de PPG Industries, Inc., por lo tanto, PPG Industries, Inc. se reserva el derecho absoluto

para modificar y/o terminar la participación del Participante en cualquier momento, sin ninguna responsabilidad para el Participante.

Finalmente, el Participante manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de PPG Industries, Inc., por cualquier compensación o daño en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia el Participante otorga un amplio y total finiquito a PPG Industries, Inc., sus Entidades Relacionadas, afiliadas, sucursales, oficinas de representación, sus accionistas, directores, agentes y representantes legales con respecto a cualquier demanda que pudiera surgir.

Morocco

Settlement. Unless otherwise determined by the Committee, the Participant is not entitled to receive any shares of Common Stock upon vesting of the Restricted Stock Units due to exchange control regulations in Morocco. This means that upon vesting of the Restricted Stock Units, the Participant will receive a cash payment equal to the value of the underlying shares of Common Stock at vesting, less any Tax-Related Items, which will be remitted to the Participant via local payroll. Any references in the Plan and this Agreement to the issuance of shares shall not apply to the Participant.

Netherlands

There are no country-specific provisions.

New Caledonia

There are no country-specific provisions.

New Zealand

Securities Law Notice. Warning: This is an offer of rights to receive shares of Common Stock in accordance with the terms of the Plan and this Agreement. The shares of Common Stock, once acquired, will give the Participant a stake in the ownership of the Company. The Participant may receive a return if dividends are paid on the shares of Common Stock. If the Company runs into financial difficulties and is wound up, the Participant will be paid only after all creditors have been paid. The Participant may lose some or all of his or her investment.

New Zealand law normally requires people who offer financial products to give information to investors before they invest. This information is designed to help investors to make an informed decision. The usual rules do not apply to this offer because it is made under an employee share scheme. As a result, the Participant may not be given all the information usually required. The Participant will also have fewer other legal protections for this investment.

The Participant should ask questions, read all documents carefully, and seek independent financial advice before committing him- or herself. The shares of Common Stock are quoted on the New York Stock Exchange, and the Participant may be able to sell them on the New York Stock Exchange if there are interested buyers. The Participant may get less than the Participant invested. The price will depend on the demand for the shares of Common Stock.

For information on risk factors impacting the Company's business that may affect the value of the shares of Common Stock, the Participant should refer to the risk factors discussion in the Company's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are filed with the U.S. Securities and Exchange Commission and are available online at www.sec.gov, as well as on the Company's "Investor Center" website at http://investor.ppg.com/.

Nigeria

There are no country-specific provisions.

Norway

There are no country-specific provisions.

Panama

Securities Law Notice. The Restricted Stock Units and any shares of Common Stock which may be issued to the Participant upon vesting and settlement of the Restricted Stock Units do not constitute a public offering of securities, as they are available only to eligible employees of the Company and its Subsidiaries.

Philippines

Settlement. Unless otherwise determined by the Committee, the Participant is not entitled to receive any shares of Common Stock upon vesting of the Restricted Stock Units due to regulatory requirements in the Philippines. This means that upon vesting of the Restricted Stock Units, the Participant will receive a cash payment equal to the value of the underlying shares of Common Stock at vesting, less any Tax-Related Items, which will be remitted to the Participant via local payroll. Any references in the Plan and this Agreement to the issuance of shares shall not apply to the Participant.

Poland

Exchange Control Notice. If the Participant holds foreign securities (including shares of Common Stock acquired under the Plan) and maintains accounts abroad, the Participant may be required to file certain reports with the National Bank of Poland. If the Participant transfers funds in excess of EUR 15,000 into Poland, the funds must be transferred via a Polish bank account or financial institution. The Participant is required to retain the documents connected with a foreign exchange transaction for a period of five (5) years, as measured from the end of the year in which such transaction occurred. The Participant should consult with his or her personal legal advisor to determine what he or she must do to fulfill any applicable reporting duties.

Portugal

Language Consent. The Participant hereby expressly declares that he or she has full knowledge of the English language and has read, understood and freely accepted and agreed with the terms and conditions established in the Plan and the Agreement.

Conhecimento da Língua. Pela presente, o Participante declara expressamente que tem pleno conhecimento da língua inglesa e que leu, compreendeu e livremente aceitou e concordou com os termos e condições estabelecidas no Plano e no Acordo.

Exchange Control Notice. If the Participant acquires shares of Common Stock under the Plan and does not hold the shares of Common Stock with a Portuguese financial intermediary, the Participant may need to file a report with the Portuguese Central Bank. If the shares of Common Stock are held by a Portuguese financial intermediary, it will file the report for the Participant.

Republic of Korea

Foreign Asset/Account Reporting Information. If the Participant is a Korean resident, the Participant must declare all of his or her foreign financial accounts (e.g., non-Korean bank accounts, brokerage accounts, etc.) to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds KRW 500 million (or an equivalent amount in foreign currency). The Participant should consult with his or her personal tax advisor to determine the Participant's personal reporting obligations.

Domestic Broker/Exchange Control Information. Korean residents may not be permitted to sell foreign securities (such as the shares of Common Stock) through non-Korean brokers (such as Fidelity Stock Plan Services, LLC) or deposit funds resulting from the sale of shares of Common Stock in an overseas financial institution. Therefore, prior to selling the shares of Common Stock acquired under the Plan, the Participant may be required to transfer such shares to a domestic investment broker. The Participant acknowledges that the Participant is solely responsible for complying with the exchange control laws in Korea including the engagement of a domestic broker. Because the exchange control regulations may change without notice, the Participant should consult with a legal advisor to ensure compliance with any exchange control regulations applicable to any aspect of their participation in the Plan.

Romania

Language Consent. The Participant hereby expressly agrees that the Agreement, the Plan as well as all documents, notices and proceedings entered into, relating directly or indirectly hereto, be drawn up or communicated only in the English language.

Angajatul consimte în mod expres prin prezentul ca acest Contract, Programul precum şi orice alte documente, notificări, înştiinţări legate direct sau indirect de acest Contract să fie redactate sau efectuate doar în limba engleză.

Russia

Securities Law Notice. The Plan and all other materials the Participant may receive regarding the Restricted Stock Units and participation in the Plan do not constitute advertising or an offering of securities in Russia. In no event will shares of Common Stock acquired upon vesting of the Restricted Stock Units be delivered to the Participant in Russia; all shares acquired upon vesting of the Restricted Stock Units will be maintained on the Participant's behalf outside of Russia (e.g., in a brokerage account in the United States). The shares of Common Stock to be issued upon vesting of the Restricted Stock Units have not and will not be registered in Russia and, therefore, the shares of Common Stock described in any Plan documents may not be offered or placed in public circulation in Russia. The Participant is not permitted to sell shares of Common Stock directly to a Russian legal entity or resident.

Exchange Control Notice. Under exchange control regulations in Russia, the Participant may be required to repatriate certain cash amounts the Participant receives with respect to the Restricted Stock Units to Russia as soon as the Participant intends to use those cash amounts for any purpose, including reinvestment. If the repatriation requirements apply, such funds must initially be credited to the Participant through a foreign currency account at an authorized bank in Russia. After the funds are initially received in Russia, they may be further remitted to foreign banks in accordance with Russian exchange control laws.

However, the repatriation requirement may not apply with respect to cash amounts received in an account that is considered by the Central Bank of Russia to be a foreign brokerage account opened with a financial market institution other than a bank. Statutory exceptions to the repatriation requirement also may apply. The Participant should consult with his or her personal legal advisor to determine his or her exchange control obligations.

Foreign Asset/Account Reporting Information. Russian residents are required to notify Russian tax authorities within one (1) month of opening, closing or changing the details of a foreign bank or brokerage account. Russian residents also are required to report (i) the beginning and ending balances in such a foreign account each year and (ii) transactions related to such a foreign account during the year to the Russian tax authorities, on or before June 1 of the following year. The tax authorities can require the Participant to provide appropriate supporting documents related to transactions in a foreign bank account. The Participant should consult with his or her personal advisor before remitting any sale proceeds or other amounts related to the Plan (e.g., Dividend Equivalents) to Russia, as such requirements may change.

Anti-Corruption Legislation Information. Individuals holding public office in Russia, as well as their spouses and dependent children, may be prohibited from opening or maintaining a foreign brokerage or bank account and holding any securities, whether acquired directly or indirectly, in a foreign company (including shares of Common Stock acquired under the Plan). The Participant should consult with his or her personal legal advisor to determine whether this restriction applies to the Participant's circumstances.

Labor Law Notice. If the Participant continues to hold shares of Common Stock acquired under the Plan after an involuntary termination of the Participant's employment, he or she will not be eligible to receive unemployment benefits in Russia.

Serbia

Securities Law Notice. The grant of the Restricted Stock Units is not subject to the regulations concerning public offers and private placements under the Law on Capital Markets.

Singapore

Restrictions on Sale and Transferability. The Participant hereby agrees that any shares of Common Stock acquired pursuant to the Restricted Stock Units will not be offered for sale in Singapore prior to the six-month anniversary of the Date of Grant, unless such sale or offer is made pursuant to the exemption under Part XIII Division I Subdivision (4) (other than section 280) of the Securities and Futures Act (Chap. 289, 2006 Ed.) ("SFA"), or pursuant to, and in accordance with the conditions of, any other applicable provision(s) of the SFA.

Securities Law Notice. The grant of the Restricted Stock Units is being made in reliance on section 273(1)(f) of the SFA, on which basis it is exempt from the prospectus and registration requirements under the SFA, and is not made to the Participant with a view to the Restricted Stock Units or underlying shares of Common Stock being subsequently offered for sale to any other party. The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Obligation. If the Participant is a director (including alternate, substitute, associate and shadow director[1]) of a Singapore Subsidiary, as these terms are used in the Singapore Companies Act (the "SCA"), the Participant agrees to comply with notification requirements under the SCA. Among these requirements is an obligation to notify the Singapore Subsidiary in writing when the Participant receives or disposes of an interest (e.g., Restricted Stock Units, shares of Common Stock) in the Company or any related company. These notifications must be made within two business days of acquiring or disposing of any interest in the Company or any related company or within two business days of becoming a director if such an interest in the Company or any related company exists at the time.

Slovakia

There are no country-specific provisions.

Slovenia

There are no country-specific provisions.

South Africa

Securities Law Notice. Neither the Restricted Stock Units nor the underlying shares of Common Stock shall be publicly offered or listed on any stock exchange in South Africa. The offer is intended to be private pursuant to Section 96(1)(g)(ii) of the Companies Act, 71 of 2008 and is not subject to the supervision of any South African governmental authority.

Spain

Terms and Conditions of the Plan. This provision supplements the Terms and Conditions of the Award paragraph of the Agreement:

In accepting the Award, the Participant acknowledges that the Participant consents to participation in the Plan and has received a copy of the Plan.

The Participant understands that the Company, in its sole discretion, has unilaterally and gratuitously decided to grant Awards under the Plan to individuals who may be employees of the Company or a Subsidiary throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Employer on an ongoing basis. Consequently, the Participant understands that the Award is granted on the assumption and condition that the Award and the shares of Common Stock issued upon settlement of the Award shall not become a part of any employment contract (either with the Company or a Subsidiary) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. In addition, the Participant understands that the grant of the Award would not be made to the Participant but for the assumptions and conditions referred to above; thus, the Participant acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then any grant of an Award shall be null and void.

[1] A shadow director is an individual who is not on the board of directors of a company but who has sufficient control so that the board of directors acts in accordance with the "directions or instructions" of the individual.

If a Participant's employment is terminated for any reason (including termination by the Company or a Subsidiary without cause or another termination of employment caused directly or indirectly by the Company or a Subsidiary) other than retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, the Participant forfeits all rights to the Award.

Securities Law Notice. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory in connection with the Award. The Agreement has not nor will it be registered with the Comision Nacional del Mercado de Valores, and does not constitute a public offering prospectus.

Suriname

There are no country-specific provisions.

Sweden

Taxes. The following supplements the Taxes paragraph of the Agreement:

Without limiting the Company's and the Employer's authority to satisfy their withholding obligations for Tax-Related Items as set forth in the Taxes paragraph of the Agreement, in accepting the Restricted Stock Units, the Participant authorizes the Company and/or the Employer to sell or withhold or sell shares of Common Stock otherwise deliverable to the Participant upon vesting to satisfy Tax-Related Items, regardless of whether the Company and/or the Employer have an obligation to withhold such Tax-Related Items.

Switzerland

Securities Law Notice. Because this is a private offering in Switzerland, the Restricted Stock Units are not subject to registration in Switzerland. Neither this document nor any other materials relating to the Restricted Stock Units (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed or otherwise made publicly available in Switzerland to any person other than an employee of the Company or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority (*FINMA*).

Taiwan

Securities Law Notice. The Restricted Stock Units and the shares of Common Stock to be issued upon vesting/settlement of the Restricted Stock Units are available only for employees of the Company, its Subsidiaries and affiliates. The Award is not a public offer of securities by a Taiwanese company.

Exchange Control Notice. If the Participant is a resident of Taiwan (including an expatriate holding an Alien Resident Certificate), the Participant may acquire foreign currency and remit the same out of or into Taiwan up to US$5,000,000 per year without justification. If the Participant is an expatriate employee who does not have an Alien Resident Certificate, the Participant may remit into Taiwan and convert to local currency up to US$100,000 at each remittance with no annual limitation.

Thailand

Exchange Control Notice. The Participant may be required to immediately repatriate the proceeds from the sale of shares of Common Stock and any cash dividends or Dividend Equivalents received in relation to the shares to Thailand and convert the funds to Thai Baht within 360 days of repatriation if the proceeds realized in a single transaction exceed US$1,000,000 (unless the Participant can rely on any applicable exemptions (e.g., where the funds will be used offshore for any permissible purposes under exchange control regulations and the relevant form and supporting documents have been submitted to a commercial bank in Thailand)). In addition, the Participant must report the inward remittance by submitting the Foreign Exchange Transaction Form to the authorized agent. If the Participant fails to comply with these obligations, the Participant may be subject to penalties assessed by the Bank of Thailand. The Participant should consult his or her personal advisor before taking any action with respect to the remittance of proceeds from the sale of shares, any cash dividends or Dividend Equivalents into Thailand. It is the Participant's responsibility to comply with the Thailand exchange control laws, and

neither the Company nor the Employer will be liable for any fines or penalties resulting from failure to comply with applicable laws.

Turkey

Securities Law Notice. Under Turkish law, the Participant is not permitted to sell any shares of Common Stock acquired under the Plan in Turkey. The Shares are currently traded on the New York Stock Exchange, under the ticker symbol “PPG” and the shares of Common Stock may be sold through this exchange.

Exchange Control Notice. The Participant may be required to engage a Turkish financial intermediary to assist with the sale of shares of Common Stock acquired under the Plan. As the Participant is solely responsible for complying with any applicable financial intermediary requirements, the Participant should consider consulting his or her personal legal advisor prior to the vesting of the Restricted Stock Units or any sale of shares of Common Stock to ensure compliance.

United Arab Emirates

Securities Law Notice. The Restricted Stock Units granted under the Plan are being offered only to eligible employees of the Company and its Subsidiaries are in the nature of providing equity incentives to such employees. Any documents related to the Restricted Stock Units, including the Plan, Agreement, including this Appendix, and any other grant documents (“Award Documents”), are intended for distribution only to such eligible employees and must not be delivered to, or relied on by, any other person.

The Emirates Securities and Commodities Authority has no responsibility for reviewing or verifying any Award Documents or any other incidental communication materials distributed in connection with the Restricted Stock Units. Further, neither the Ministry of Economy nor the Dubai Department of Economic Development has approved the Award Documents or taken steps to verify the information set out in them, and thus, is not responsible for their content.

Participants should, as prospective stockholders, conduct their own due diligence on the securities. If the Participant does not understand the contents of the Award Documents, he or she should consult an authorized financial advisor.

United Kingdom

Taxes. The following supplements the Taxes paragraph of the Agreement:

Without limitation to the Taxes paragraph of the Agreement, the Participant agrees that the Participant is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items as and when requested by the Company or the Employer or by HM Revenue and Customs (“HMRC”) (or any other tax authority or any other relevant authority). The Participant also agrees to indemnify and keep indemnified the Company and the Employer against any Tax–Related Items that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on the Participant’s behalf.

Notwithstanding the foregoing, if the Participant is a director or executive officer of the Company (within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply. In such case, if the amount of any income tax due is not collected from or paid by the Participant within 90 days of the end of the UK tax year in which an event giving rise to the indemnification described above occurs, the amount of any uncollected income tax may constitute a benefit to the Participant on which additional income tax and national insurance contributions (“NICs”) may be payable. The Participant will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Employer for the value of any employee NICs due on this additional benefit, which the Company or the Employer may recover from the Participant at any time thereafter by any of the means referred to in this Agreement.

Uruguay

There are no country-specific provisions.

Vietnam

Settlement. Unless otherwise determined by the Committee, the Participant is not entitled to receive any shares of Common Stock upon vesting of the Restricted Stock Units due to exchange control regulations in Vietnam. This means that upon vesting of the Restricted Stock Units, the Participant will receive a cash payment equal to the value of the underlying shares of Common Stock at vesting, less any Tax-Related Items, which will be remitted to the Participant via local payroll. Any references in the Plan and this Agreement to the issuance of shares shall not apply to the Participant.

GRANT NOTICE FOR
TIME-VESTED RESTRICTED STOCK UNIT AWARD

#GrantDate#

PPG Industries, Inc. (the "Company") and the Participant identified below are parties to a Global Restricted Stock Unit Award Agreement dated as of #GrantDate+C# (the "Agreement") and attached to this Grant Notice. Capitalized terms used in this Grant Notice shall have the respective meanings given to such terms in the Agreement or in the Plan (as defined in the Agreement), unless otherwise defined in this Grant Notice. This Grant Notice confirms the grant to the Participant of an Award of Restricted Stock Units with the terms set forth below. This Grant Notice is hereby incorporated by reference into and forms a part of the Agreement.

Participant Name:	#ParticipantName#
Date of Grant:	#GrantDate#
Number of Restricted Stock Units Granted:	#QuantityGranted#
Dividend Equivalents:	"Dividend Equivalents" are not granted with respect to this Restricted Stock Unit Award. "Dividend Equivalents" means the right to receive the equivalent value (in cash or shares) of dividends paid on one share of Common Stock for each share that is covered by (but not yet issued) under an Award.
Vesting Date:	#VestDate_1#
Award Goals:	The Participant must be continuously employed by the Company or its Subsidiaries, in good standing (as determined by the Company in its sole discretion), through the Vesting Date (as set forth above), subject to the provisions of the Agreement regarding disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, death and other termination of employment.

PPG Industries, Inc.

_____
By:

PPG INDUSTRIES, INC.

GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT

#GrantDate#

This GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT (this "Agreement") is entered into as of the date first written above by and between PPG Industries, Inc. (the "Company") and #ParticipantName+C# (the "Participant").

The Company maintains the PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan (as amended from time to time, the "Plan"), which is incorporated into and forms a part of this Agreement, and the Participant has been selected by the Company to receive an Award under the Plan. Capitalized terms used in this Agreement shall, unless defined elsewhere in this Agreement, have the respective meanings given to such terms in the Grant Notice (as defined below) or the Plan.

The Award of Restricted Stock Units shall be confirmed by a separate Grant Notice to which this Agreement is attached (the "Grant Notice"), specifying the Date of Grant of the Award, the number of Restricted Stock Units granted and the Award Goals (as defined in the Grant Notice) applicable to such Restricted Stock Units. Each Restricted Stock Unit is a bookkeeping entry representing the equivalent in value of a share of Common Stock. Such Award shall be subject to the terms and conditions of the Plan and this Agreement. Such Grant Notice shall be deemed incorporated by reference into this Agreement.

NOW, THEREFORE, the Company and the Participant, intending to be legally bound, agree as follows:

1. Terms and Conditions of the Award.

A. This Agreement sets forth the terms and conditions applicable to the Award of Restricted Stock Units confirmed in the Grant Notice. The Award of Restricted Stock Units is made under Article VII of the Plan. Unless and until the Restricted Stock Units are vested in the manner set forth in paragraph 1.P. and 2.A. hereof, the Participant shall have no right to settlement of any such Restricted Stock Units.

B. The Plan is established voluntarily by the Company, is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, except as otherwise expressly provided in the Plan, the Grant Notice and/or this Agreement.

C. The Award is exceptional, voluntary and occasional and does not create any contractual or other right to receive future awards of Restricted Stock Units, or benefits in lieu of Restricted Stock Units even if Restricted Stock Units have been awarded in the past.

D. All decisions with respect to future awards, if any, will be at the sole discretion of the Company.

E. The Participant's participation in the Plan is voluntary.

F. For Participants located outside of the United States, the Restricted Stock Units are an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Company or, if different, the Subsidiary employing the Participant (the "Employer") and the Restricted Stock Units are outside the scope of the Participant's employment contract, if any.

G. The Restricted Stock Units, the underlying shares of Common Stock, and the income and value of same, are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculation of any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Company or any Subsidiary.

H. Neither the award of Restricted Stock Units nor any provision of this Agreement, the Plan, the Grant Notice or any policies adopted pursuant to the Plan confer upon the Participant any right with

respect to employment or continuation of current employment with the Company or any Subsidiary, and in the event that the Participant is not an employee of the Company, the award of Restricted Stock Units shall not be interpreted to form an employment contract or relationship with the Company or any Subsidiary.

I. The future value of the underlying shares of Common Stock is unknown, indeterminable and cannot be predicted with certainty.

J. No claim or entitlement to compensation or damages shall arise from forfeiture of the Award resulting from termination of the Participant's employment (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any).

K. The Committee may terminate the Award at any time on or prior to the Vesting Date (as defined in the Grant Notice) if, in its sole discretion, the Committee determines that the Participant is no longer in a position to have a substantial opportunity to influence the long-term growth of the Company.

L. Prior to settlement of any vested Restricted Stock Units, such Restricted Stock Units will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. The Company's obligations under this Agreement shall be unfunded and unsecured, and no special or separate fund shall be established and no other segregation of assets shall be made and the Participant shall have no greater rights than an unsecured general creditor of the Company. Except as otherwise specifically provided in the Grant Notice or this Agreement, the Participant shall have no rights as a stockholder of the Company by virtue of any Restricted Stock Units granted under this Award unless and until such Award is determined to be vested and resulting shares of Common Stock are issued to the Participant.

M. If the Participant's employment with the Company or any Employer terminates prior to the Vesting Date but, on or after the first anniversary of the Date of Grant because of retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, the Participant shall be entitled to the same payments under the Award to which the Participant would have been entitled had the Participant's employment continued through the Vesting Date, and such Award shall be paid as soon as practicable following the Vesting Date, subject to paragraph 2.C. hereof; provided, however, that the Committee, in its sole discretion, may determine that the Participant will be entitled to a lesser Award.

N. If the Participant's employment with the Company or any Employer terminates prior to the Vesting Date for any reason other than retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, or for any reason before the first anniversary of the Date of Grant, the Participant's Award shall be forfeited on the date of such termination.

O. For purposes of the Award, the Participant's employment or service relationship will be considered terminated as of the date the Participant is no longer actively providing services to the Company or one of its Subsidiaries (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any), and unless otherwise expressly provided in this Agreement, the Plan, the Grant Notice, the Change in Control Agreement, or any offer letter and/or employment agreement referenced herein, or determined by the Company, the Participant's right to vest in the Award under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., the Participant's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any); the Committee shall have the exclusive discretion to determine when the Participant is no longer actively providing services for purposes of the Award (including whether the Participant may still be considered to be providing services while on a leave of absence).

P. The Committee shall determine the extent, if any, to which the applicable Award Goals have been attained and the extent, if any, to which the Award has been earned by the Participant.

Q. In the event that, during the Change in Control Period (as hereinafter defined), the Participant is subject to an Involuntary Termination (as hereinafter defined), then the Award shall become

fully vested, and the payout of the Award shall be made as soon as practicable following the date of the Involuntary Termination, subject to paragraph 2.C. hereof (for avoidance of doubt, the Restricted Stock Units that vest pursuant to this paragraph 1.Q. shall not be subject to the performance and determination procedures contemplated by paragraph 1.P. hereof). The amount of any cash to be paid in lieu of Common Stock, if any, shall be determined using the closing sale price reported on the New York Stock Exchange-Composite Tape for the Common Stock on the date of Involuntary Termination, or if there is no sale on such date, for the nearest preceding date upon which such sale took place. If required to avoid additional taxes, penalties or interest under Section 409A (as determined by the Committee, in its sole discretion), the Company and the Participant shall take all steps necessary (including with regard to post-termination services by the Participant) to ensure that an Involuntary Termination constitutes a "separation from service" within the meaning of Section 409A of the Code, and notwithstanding anything contained herein to the contrary, the date on which a separation from service takes place for reasons resulting in an Involuntary Termination shall be the date of the Involuntary Termination.

If the Participant is a party to a Change in Control Employment Agreement with the Company (a "Change in Control Agreement"), "Change in Control Period" for purposes of this Agreement shall have the meaning ascribed to the term "Employment Period," as defined in the Change in Control Agreement, and if the Participant is not a party to a Change in Control Agreement, the term shall mean the period commencing on the date of a Change in Control (as defined in the Plan) and ending on the earlier of the Participant's date of Retirement and the Vesting Date. "Retirement" for purposes of this paragraph 1.Q. shall mean the Participant's termination of employment on or after (i) with respect to a participant in a tax-qualified defined benefit pension plan sponsored by PPG, an Participant's "normal retirement date" as defined in such pension plan, (ii) with respect to any Participant that the Company may subject to compulsory retirement under the Age Discrimination in Employment Act (29 U.S.C. § 621 et. seq.) (ADEA) as a "bona fide executive or a high policy maker," such Participant's "normal retirement date," (iii) with respect to a participant in the PPG Industries Defined Contribution Retirement Plan, the Participant's Social Security normal retirement date, provided that such termination is voluntary, or, (iv) with respect to a participant for whom the provisions in (i) through (iii) are not applicable, the Participant's attainment of age sixty-five (65), provided the termination is a voluntary resignation by the Participant.

"Involuntary Termination" for purposes of this Agreement shall mean, if the Participant is a party to a Change in Control Agreement, a termination of the Participant's employment that gives rise to payments and benefits under Section 6 of the Change in Control Agreement, and if the Participant is not a party to a Change in Control Agreement, shall mean a termination by the Company for any reason other than Cause, death or Disability (as the terms are hereinafter defined). "Cause" for purposes of a Participant who is not a party to a Change in Control Agreement shall have the same meaning as that term is defined in the Participant's offer letter or other applicable employment agreement; or, if there is no such definition, "Cause" means, as determined by the Committee in good faith: (i) engaging in any act, or failing to act, or misconduct that is injurious to the Company or its Subsidiaries; (ii) gross negligence or willful misconduct in connection with the performance of duties; (iii) conviction of (or entering a plea of guilty or *nolo contendere* to) a criminal offense (other than a minor traffic offense); (iv) fraud, embezzlement or misappropriation of funds or property of the Company or a Subsidiary; (v) breach of any material term of any agreement between the Participant and the Company or a Subsidiary relating to employment, consulting or other services, confidentiality, intellectual property or non-competition; (vi) the entry of an order duly issued by any regulatory agency (including federal, state and local regulatory agencies and self-regulatory bodies) having jurisdiction over the Company or a Subsidiary requiring the removal from any office held by the Participant with the Company or prohibiting or materially limiting the Participant from participating in the business or affairs of the Company or any Subsidiary. "Disability" for purposes of this Agreement shall mean disability, which, after the expiration of more than 52 weeks after its commencement, is determined to be total and permanent by a physician selected by the Company or its insurers.

R. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan or sale of the underlying shares of Common Stock.

S. The Participant should consult with his or her own personal tax, legal and financial advisors regarding the Participant's participation in the Plan before taking any action related to the Plan or Restricted Stock Units.

T. Unless otherwise provided in the Plan or by the Company in its discretion, the Award and the benefits evidenced by this Agreement do not create any entitlement to have the Award or any such

benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company.

U. Unless otherwise agreed with the Company, the Award, the underlying shares of Common Stock, and the income and value of same, are not granted as consideration for, or in connection with, the service the Participant may provide as a director of any Subsidiary.

V. Neither the Company, the Employer nor any Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the Award or of any amounts due to the Participant pursuant to the vesting/settlement of the Award or the subsequent sale of any shares of Common Stock acquired upon vesting/settlement.

2. Payout on Account of Awards.

A. Upon attainment of the Award Goals and satisfaction of all other applicable conditions as to the issuance of the Restricted Stock Units, and otherwise subject to this Agreement and the terms of the Plan, the Participant shall be entitled to the number of shares of Common Stock constituting the Award as determined by the Committee in accordance with paragraph 1.P. The Participant shall be entitled to receive a payout of the vested Award in the form of cash, shares of Common Stock or a combination of cash and shares, less any Tax-Related Items as defined in paragraph 6, as determined by the Committee in its sole discretion. The amount of any cash to be paid in lieu of Common Stock shall be determined on the basis of the Fair Market Value of the Common Stock as of the applicable Vesting Date.

B. Any shares of Common Stock issued to the Participant with respect to his or her Award shall be subject to such restrictions as the Committee may deem advisable under the rules, regulations and other requirements of the U.S. Securities and Exchange Commission, the New York Stock Exchange and any applicable state or foreign securities laws, and the Committee may cause a legend or legends to be endorsed on any stock certificates for such shares making appropriate references to such legal restrictions.

C. Except as otherwise provided in this Agreement, the issuance of the shares of Common Stock in accordance with the provisions of paragraph 1 and this paragraph 2 will be delivered by March 15 of the calendar year following (i) the Vesting Date or (ii) to the extent applicable under the provisions of paragraph 1.Q. hereof, the date of an Involuntary Termination following a Change in Control.

3. Continuing Conditions. Notwithstanding any other provisions herein, the Participant, by execution of this Agreement, agrees and acknowledges that in return for the Award granted by the Company in this Agreement, the following continuing conditions shall apply:

A. If at any time prior to the Vesting Date or within one (1) year after the Vesting Date the Participant engages in any activity in competition with any activity of the Company or any of its Subsidiaries, or contrary or harmful to the interests of the Company or any of its Subsidiaries, including, but not limited to: (1) conduct related to the Participant's employment for which either criminal or civil penalties against the Participant may be sought; (2) violation of Company (or Subsidiary) Code of Ethics or similar policy; (3) accepting employment with or serving as a consultant, advisor or in any other capacity to an employer that is in competition with or acting against the interests of the Company or any of its Subsidiaries, including employing or recruiting any present, former or future employee of the Company or any of its Subsidiaries; (4) disclosing or misusing any confidential information or material concerning the Company or any of its Subsidiaries; or (5) participating in a hostile takeover attempt, then this Award shall terminate effective as of the date on which the Participant enters into such activity, unless terminated sooner by operation of another term or condition of this Agreement, and any "Award Gain" realized by the Participant shall be paid by the Participant to the Company. "Award Gain" shall mean the cash and the Fair Market Value of the Common Stock delivered to the Participant pursuant to paragraph 2 on the date of such delivery times the number of shares so delivered.

B. By accepting this Agreement, the Participant consents to a deduction from any amounts the Company or any of its Subsidiaries owes the Participant from time to time (including amounts owed the Participant as wages or other compensation, fringe benefits or vacation pay, as well as any other amounts owed to the Participant by the Company or any of its Subsidiaries), to the extent of the amounts payable to the Company by the Participant under paragraph 3.A. above. Whether or not the Company elects to make any set-off in whole or in part, if the Company does not recover by means of set-off the full

amount payable by the Participant, calculated as set forth above, the Participant agrees to pay immediately the unpaid balance to the Company.

C. The Participant may be released from the Participant's obligations under paragraphs 3.A and 3.B above only if the Committee determines, in its sole discretion that such action is in the best interest of the Company.

4. Award Subject to Plan Provisions. Unless otherwise expressly provided in the Grant Notice or this Agreement, the Restricted Stock Unit Award shall be subject to the provisions of the Plan, including, without limitation, Article XI. In the event of any conflict between this Agreement and either the Grant Notice or the Plan, the Grant Notice or Plan, as applicable, shall control over this Agreement.

5. Applicable Law; Entire Agreement; Venue. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without reference to any choice of law principles. The Grant Notice, this Agreement, the Plan, the Change in Control Agreement, and any offer letter and/or employment agreement referenced herein, contain all terms and conditions with respect to the subject matter hereof.

For purposes of litigating any dispute that arises under the Award or this Agreement, the parties hereby submit to and consent to the jurisdiction of the Commonwealth of Pennsylvania, and agree that such litigation shall be conducted in the courts of Allegheny County, Pennsylvania, or other federal courts for the United States for the Western District of Pennsylvania, where this Award of Restricted Stock Units is made and/or to be performed, and no other courts. The parties agree that, if suit is filed in Allegheny County courts, application will be made by one or both parties, without objection, to have the case heard in the Center for Commercial and Complex Litigation of the Court of Common Pleas of Allegheny County.

6. Taxes. Regardless of any action the Company and/or the Employer take with respect to any or all income tax (including U.S. federal, state, and local tax and/or non-U.S. tax), social insurance, payroll tax, payment on account or other tax-related items related to the Participant's participation in the Plan and legally applicable to the Participant or deemed by the Company or the Employer to be an appropriate charge to the Participant ("Tax-Related Items"), the Participant acknowledges that the ultimate liability for all Tax-Related Items is and remains the Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award, including the grant and vesting of the Restricted Stock Units, the conversion of the Restricted Stock Units into shares or the receipt of an equivalent cash payment, the subsequent sale of any shares acquired pursuant to the Restricted Stock Units and the receipt of any dividends or Dividend Equivalents; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Award to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant has become subject to tax in more than one jurisdiction, the Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax-withholding event, as applicable, the Participant shall pay or make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items.

In this regard, the Participant authorizes the Company and/or the Employer, or their respective agents, to satisfy the Tax-Related Items obligation by one or a combination of the following:

(i) withholding from the proceeds of the sale of shares of Common Stock acquired upon the vesting/settlement of the Award either through a voluntary sale or through a mandatory sale arranged by the Company (on the Participant's behalf pursuant to this authorization); and /or

(ii) withholding from any wages or other cash compensation paid to the Participant by the Company and/or the Employer or from any equivalent cash payment received in connection with the Award; and /or

(iii) withholding in shares of Common Stock to be issued upon settlement of the Restricted Stock Units, provided, however that if the Participant is a Section 16 officer of the Company under the Exchange

Act, then the Company may withhold in shares of Common Stock upon the relevant taxable or tax withholding event, as applicable, only if the use of such withholding method is not problematic under applicable tax or securities law or has materially adverse accounting consequences, in which case, the obligation for Tax-Related Items may be satisfied by one or a combination of methods (i) and (ii) above.

The Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates in the Participant's jurisdiction(s). In the event of over-withholding, the Participant may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent in Common Stock or if not refunded, the Participant may seek a refund from the local tax authorities. In the event of under-withholding, the Participant may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Company and/or the Employer. If the obligation for Tax-Related Items is satisfied by withholding a number of shares as described herein, the Participant shall be deemed, for tax purposes only, to have been issued the full number of shares of Common Stock subject to the vested portion of the Award, notwithstanding that a number of shares are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of the Award. The Participant shall pay to the Company and/or the Employer any amount of Tax-Related Items that is required to be withheld or accounted for in connection with the Restricted Stock Units that cannot be satisfied by the means previously described. The Company may refuse to deliver to the Participant any shares of Common Stock pursuant to the Award if the Participant fails to comply with his or her obligations in connection with the Tax-Related Items.

Anything in this paragraph 6 to the contrary notwithstanding, the number of shares of Common Stock subject to Restricted Stock Units that will be permitted to be released and withheld (or sold on the Participant's behalf) to satisfy any Tax-Related Items arising prior to the date the shares are scheduled to be delivered pursuant to paragraph 2.C. hereof for any portion of the Restricted Stock Units that are considered nonqualified deferred compensation subject to Section 409A of the Code shall not exceed the number of shares of Common Stock that equals the liability for the Tax-Related Items.

7. Further Assurances. The Participant agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver and perform all additional documents, instruments and agreements (including, without limitation, stock powers with respect to shares of Common Stock issued or otherwise distributed in relation to this Award) which may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Grant Notice, this Agreement and the Plan.

8. Transfer Restrictions. This Award and the Restricted Stock Units are not transferable other than by will or the laws of descent and distribution, and may not be assigned, hypothecated or otherwise pledged and shall not be subject to execution, attachment or similar process. Upon any attempt to effect any such disposition, or upon the levy of any such process, the Award shall immediately become null and void and the Restricted Stock Units shall be forfeited.

9. Capitalization Adjustments. The number of Restricted Stock Units awarded is subject to adjustment as provided in Section 11.07(a) of the Plan. The Participant shall be notified of such adjustment and such adjustment shall be binding upon the Company and the Participant.

10. Securities Law Compliance. Notwithstanding anything to the contrary contained herein, no shares of Common Stock shall be issued to the Participant upon vesting of this Restricted Stock Unit Award unless the Common Stock is then registered under the Securities Act, or, if such Common Stock is not then so registered, the Company has determined that such vesting and issuance would be exempt from the registration requirements of the Securities Act. Participant's sale of Shares may be subject to any closed trading windows that may be imposed by the Company and must comply with the Company's insider trading policies (as may be amended from time to time by the Company in its sole discretion) and any other applicable securities laws. The Company's insider trading policy may prohibit Participant from buying or selling Shares. By accepting this Award, the Participant agrees not to sell any of the shares of Common Stock received under this Award at a time when the applicable laws or Company policies prohibit a sale.

11. ***Data Privacy. For Participants located outside of the United States:***

Data Privacy Consent. By electing to participate in the Plan via the Company's online acceptance procedure, the Participant is declaring that he or she agrees with the data

processing practices described herein and consents to the collection, processing and use of Personal Data (as defined below) by the Company and the transfer of Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other) data protection law perspective, for the purposes described herein.

Declaration of Consent. The Participant understands that he or she needs to review the following information about the processing of his or her personal data by or on behalf of the Company, the Employer and/or any Subsidiary as described in the Agreement and any other Plan materials (the "Personal Data") and declare his or her consent. As regards the processing of the Participant's Personal Data in connection with the Plan and this Agreement, the Participant understands that the Company is the controller of his or her Personal Data.

Data Processing and Legal Basis. The Company collects, uses and otherwise processes Personal Data about the Participant for the purposes of allocating shares of Common Stock and implementing, administering and managing the Plan. The Participant understands that this Personal Data may include, without limitation, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Restricted Stock Units or any other entitlement to shares of stock or equivalent benefits awarded, cancelled, exercised, vested, unvested or outstanding in the Participant's favor. The legal basis for the processing of the Participant's Personal Data, where required, will be his or her consent.

Stock Plan Administration Service Providers. The Participant understands that the Company transfers his or her Personal Data, or parts thereof, to Fidelity Stock Plan Services, LLC (and its affiliated companies), an independent service provider based in the United States which assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participant's Personal Data with such different service provider that serves the Company in a similar manner. The Participant understands and acknowledges that the Company's service provider will open an account for him or her to receive and trade shares of Common Stock acquired under the Plan and that he or she will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of the Participant's ability to participate in the Plan.

International Data Transfers. The Participant understands that the Company and, as of the date hereof, any third parties assisting in the implementation, administration and management of the Plan, such as Fidelity Stock Plan Services, LLC, are based in the United States. The Participant understands and acknowledges that his or her country may have enacted data privacy laws that are different from the laws of the United States. The Company's legal basis for the transfer of the Participant's Personal Data is his or her consent.

Data Retention. The Participant understands that the Company will use his or her Personal Data only as long as is necessary to implement, administer and manage his or her participation in the Plan, or to comply with legal or regulatory obligations, including under tax and securities laws. In the latter case, the Participant understands and acknowledges that the Company's legal basis for the processing of his or her Personal Data would be compliance with the relevant laws or regulations. When the Company no longer needs the Participant's Personal Data for any of the above purposes, the Participant understands the Company will remove it from its systems.

Voluntariness and Consequences of Denial/Withdrawal of Consent. The Participant understands that his or her participation in the Plan and his or her consent is purely voluntary. The Participant may deny or later withdraw his or her consent at any time, with future effect and for any or no reason. If the Participant denies or later withdraws his or her consent, the Company can no longer offer the Participant participation in the Plan or offer other equity awards to the Participant or administer or maintain such awards and the Participant would no longer be able to participate in the Plan. The Participant further understands that denial or withdrawal of his or her consent would not affect his or her

status or salary as an employee or his or her career and that the Participant would merely forfeit the opportunities associated with the Plan.

Data Subject Rights. The Participant understands that data subject rights regarding the processing of Personal Data vary depending on the applicable law and that, depending on where the Participant is based and subject to the conditions set out in the applicable law, the Participant may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Company holds about him or her and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about him or her that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of his or her objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Company to restrict the processing of his or her Personal Data in certain situations where the Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of the Participant's Personal Data that he or she has actively or passively provided to the Company (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or his or her employment and is carried out by automated means. In case of concerns, the Participant understands that he or she may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of, the Participant's rights, the Participant understands that he or she should contact his or her local human resources representative.

12. Severability. If any provision of this Agreement shall be held to be illegal, invalid or unenforceable, that provision will be enforced to the maximum extent permissible and the legality, validity and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

13. Waiver. The Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

14. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

15. Code Section 409A. If the Participant is a "specified employee," within the meaning of Section 409A of the Code and the U.S. Treasury Regulations promulgated thereunder (collectively, "Section 409A"), at the time of a separation from service, any payments made under this Agreement in connection with a separation from service shall instead be paid on the first business day following the expiration of the six (6)-month period following the Participant's separation from service or, if earlier, death of the Participant, if necessary to comply with Section 409A.

It is the intent that the Restricted Stock Units shall comply with the requirements of (or be exempt from the application of) Section 409A, and any ambiguities herein will be interpreted to so comply (or be exempt). The Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify this Agreement as may be necessary to ensure that all vesting or payouts provided under this Agreement are made in a manner that complies with Section 409A or to mitigate any additional tax, interest and/or penalties or other adverse tax consequences that may apply under Section 409A if compliance is not practical; provided, however, that nothing in this paragraph 15 creates an obligation on the part of the Company to modify the terms of this Agreement or the Plan, and the Company makes no representation that the terms of the Restricted Stock Units will comply with (or be exempt from the application of) Section 409A or that payments under the Restricted Stock Units will not be subject to taxes, interest and penalties or other adverse tax consequences under Section 409A. In no event whatsoever shall the Company or any of its Subsidiaries or affiliates be liable to any party for any additional tax, interest or penalties that may be imposed on the Participant by Section 409A or any damages for failing to comply with (or be exempt from the application of) Section 409A.

16. Language. By electing to accept this Award, the Participant acknowledges that he or she is sufficiently proficient in English, or has consulted with an advisor who is sufficiently proficient in English so as to allow the Participant, to understand the terms and conditions of this Agreement. Further, if the Participant has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

17. Insider Trading Restrictions/Market Abuse Laws. The Participant may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and the Participant's country or his or her broker's country, if different, which may affect his or her ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to such shares (*e.g.*, Restricted Stock Units) or rights linked to the value of shares of Common Stock (e.g., Dividend Equivalents) during such times as the Participant is considered to have "inside information" regarding the Company (as defined by any applicable laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders the Participant placed before he or she possessed inside information. Furthermore, the Participant could be prohibited from (i) disclosing the inside information to any third party, which may include fellow employees and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy and under United States law. The Participant is responsible for ensuring compliance with any applicable restrictions and should consult his or her personal legal advisor on this matter.

18. Foreign Asset/Account Reporting Requirements; Exchange Controls. The Participant acknowledges that his or her country may have certain foreign asset and/or account reporting requirements and/or exchange controls that may affect his or her ability to acquire or hold shares of Common Stock or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of shares of Common Stock) in a brokerage or bank account outside the Participant's country. The Participant may be required to report such accounts, assets or transactions to the tax or other authorities in his or her country. The Participant also may be required to repatriate sale proceeds or other funds received as a result of his or her participation in the Plan to his or her country through a designated bank or broker and/or within a certain time after receipt. The Participant acknowledges that it is his or her responsibility to be compliant with such regulations, and the Participant is advised to consult his or her personal legal advisor for any details.

19. Appendix. Notwithstanding any provision herein, the Participant's participation in the Plan shall be subject to any additional terms and conditions as set forth in the Appendix for the Participant's country of residence, if any. Moreover, if the Participant relocates to another country, the special terms and conditions for such country will apply to the Participant; to the extent, the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

20. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Participant's participation in the Plan, on the Restricted Stock Units and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

21. Compensation Recovery Policy. This Award and any proceeds, gains or other economic benefit received by the Participant from a subsequent sale of Shares issued under this Award shall be subject to the Company's Compensation Recovery Policy in effect as of the date hereof, as may be amended from time to time to comply with applicable laws (the "Compensation Recovery Policy"). The Participant acknowledges and agrees that no recovery or other action related to this Award pursuant to the Compensation Recovery Policy shall constitute an event that triggers or contributes to any right the Participant may have to resign for "good reason" or "constructive termination" (or similar term) under any compensatory arrangement with the Company or any of its Subsidiaries. The Participant acknowledges and agrees that the Participant's acceptance of this Award shall be deemed to constitute the Participant's

acknowledgement of and consent to the Company's application, implementation and enforcement of the Compensation Recovery Policy.

PPG Industries, Inc.

_____

By:

If I am subject to the PPG Stock Ownership Requirement Policy, I authorize PPG's stock plan administrator to follow PPG's instructions, including but not limited to, instructions to not accept my orders to transact in company stock received upon vesting of this award that are subject to restriction on sale or transfer imposed by PPG in the event that I do not meet the required stock ownership level under PPG's Stock Ownership Requirement Policy, including instructions to not allow shares of company stock received upon vesting of this award to be transferred out of my account with PPG's stock plan administrator. I acknowledge and agree that execution of my orders to transact in or to transfer shares of company stock received upon vesting of this award may be delayed or never occur.

Fidelity Stock Plan Services, LLC, provides recordkeeping and/or administrative services to your company's equity compensation plan, in addition to any services provided directly to the plan by your company or its service providers.

APPENDIX
PPG INDUSTRIES, INC.
GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT

This Appendix includes special terms and conditions that govern the Award granted to the Participant if the Participant resides outside of the United States in one of the countries listed herein.

If the Participant is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the Company shall, in its sole discretion, determine to what extent the terms and conditions included herein will apply to the Participant.

This Appendix may also include information regarding exchange controls and certain other issues of which the Participant should be aware with respect to his or her participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of November 2023. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Participant not rely on the information noted herein as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time the Restricted Stock Units vest or when the Participant sells shares of Common Stock acquired under the Plan.

In addition, the information is general in nature and may not apply to the Participant's particular situation, and the Company is not in a position to assure him or her of any particular result. **Accordingly, the Participant should seek appropriate professional advice as to how the relevant laws in the Participant's country apply to his or her specific situation.**

If the Participant is a citizen or resident of another country, transfers employment and/or residency to another country after the Date of Grant, or is considered a resident of another country for local law purposes, the information contained in this Appendix may not be applicable to him or her.
Capitalized terms used but not defined herein shall have the meanings assigned to them in the Agreement (of which this Appendix is a part) and the Plan.

Argentina

Acknowledgement of Nature of Plan and Award. The following provision supplements the Terms and Conditions of the Award paragraph of the Agreement:

In accepting the grant of the Award, the Participant acknowledges and agrees that the grant of the Award is made by the Company (not the Employer) in its sole discretion and that the value of any Awards or shares of Common Stock acquired under the Plan shall not constitute salary or wages for any purpose under Argentine labor law, including the calculation of (i) any labor benefits including, but not limited to, vacation pay, thirteenth salary, compensation in lieu of notice, annual bonus, disability, and leave of absence payments, or (ii) any termination or severance indemnities. If, notwithstanding the foregoing, any benefits under the Plan are considered for purposes of calculating any termination or severance indemnities, the Participant acknowledges and agrees that such benefits shall not accrue more frequently than on an annual basis.

Securities Law Notice. Neither the Restricted Stock Units nor the underlying shares of Common Stock are publicly offered or listed on any stock exchange in Argentina.

Australia

Australian Offer Document. This offer is being made under Division 1A, Part 7.12 of the Corporations Act 2001 (Cth). Please note that if the Participant offers the shares of Common Stock acquired under the Plan for sale to a person or entity resident in Australia, the offer may be subject to disclosure requirements under Australian law. The Participant agrees to obtain legal advice on the Participant's disclosure obligations prior to making any such offer.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies to Restricted Stock Units granted under the Plan, such that the Restricted Stock Units are intended to be subject to deferred taxation.

Austria

There are no country-specific provisions.

Belgium

Foreign Asset/Account / Exchange Control Reporting Information. Belgian residents are required to report any securities and bank or brokerage accounts held outside of Belgium on their annual tax return. In a separate report, Belgian residents are required to provide the National Bank of Belgium with the account details of any such foreign accounts (including the account number, bank name and country in which any such account was opened). This report, as well as additional information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under the Kredietcentrales / Centrales des crédits caption.

Annual Securities Account Tax. If the total average value of securities held in a Belgian or foreign securities account exceeds EUR 1 million, an “annual securities accounts tax” applies. Belgian residents should consult with their personal tax advisor regarding the tax.

Brazil

Compliance with the Law. In accepting the grant of the Restricted Stock Units, the Participant acknowledges his or her agreement to comply with applicable Brazilian laws and to pay any and all applicable tax associated with the Restricted Stock Units and the sale of the shares of Common Stock acquired under the Plan and the receipt of any dividends or Dividend Equivalents.

Terms and Conditions of the Award. This provision supplements paragraph 1 of the Agreement:
By accepting the Restricted Stock Units, the Participant agrees that (i) the Participant is making an investment decision, and (ii) the value of the underlying shares of Common Stock is not fixed and may increase or decrease over the vesting and holding periods without compensation to the Participant.

Tax on Financial Transactions (IOF). If the Participant repatriates amounts from the sale of shares of Common Stock or any dividends received on such shares of Common Stock into Brazil, the Participant may be subject to a Tax on Financial Transactions when funds are converted from USD to BRL. The Participant agrees that the Participant will be solely responsible for such Tax on Financial Transactions.

Canada

Restricted Stock Units Payable Only in Shares of Common Stock. Notwithstanding any discretion contained in Section 7.03(a) of the Plan or anything in the Agreement to the contrary, the grant of Restricted Stock Units does not provide any right for the Participant to receive a cash payment and the Restricted Stock Units are payable in shares of Common Stock only.

Termination of Vesting. This provision supplements paragraph 1. O. of the Agreement:
Notwithstanding the foregoing, if applicable employment standards legislation explicitly requires continued participation in the Plan during a statutory notice period, the Participant acknowledges that his or her right to participate in the Plan, if any, will terminate effective as of the last day of his or her minimum statutory notice period, but the Participant will not earn or be entitled to any pro-rated vesting if the vesting date falls after the end of his or her statutory notice period, nor will the Participant be entitled to any compensation for lost vesting.

Securities Law Notice. The Participant is permitted to sell shares of Common Stock acquired under the Plan, provided the resale of such shares of Common Stock takes place outside of Canada through the facilities of a stock exchange on which the Company’s Common Stock is listed. The Company’s Common Stock is currently traded on the New York Stock Exchange which is located outside of Canada, under the ticker symbol “PPG” and shares of Common Stock acquired under the Plan may be sold through this exchange.

The following provisions will apply to the Participant if he or she is a resident of Quebec:

Language. A French translation of the Agreement and the Plan will be made available to the Participant. The Participant understands that, from time to time, additional information related to the Plan might be provided in English and such information may not be immediately available in French. However, upon request, the Company will translate into French documents related to the Plan as soon as reasonably practicable. Notwithstanding anything to the contrary in the Agreement, and unless the Participant indicates otherwise, the French translation of the Agreement and the Plan will govern the Participant's participation in the Plan.

Data Privacy. This provision supplements the Data Privacy paragraph of the Agreement:
The Participant hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. The Participant further authorizes the Company, any Subsidiary, and the administrator of the Plan to disclose and discuss the Plan with their advisors. The Participant acknowledges and agrees that their personal information, including sensitive personal information, may be transferred or disclosed outside the Province of Quebec, including to the United States. The Participant authorizes the Company and any Subsidiary to record such information and to keep such information in their employee file. The Participant also acknowledges and authorizes the Company and other parties involved in the administration of the Plan to use technology for profiling purposes and to make automated decisions that may have an impact on the Participant or the administration of the Plan.

Chile

Securities Law Notice. This offer conforms to general ruling N°336 of the Chilean Commission for the Financial Market ("CMF"). The offer deals with securities not registered in the registry of securities or in the registry of foreign securities of the CMF, and therefore such securities are not subject to its oversight. The issuer is not obligated to provide public information in Chile regarding the foreign securities, since such securities are not registered with the CMF. The securities shall not be subject to public offering as long as they are not registered with the corresponding registry of securities in Chile, unless they fulfill the requirements set forth in general ruling N°336 of the CMF.

China

Termination of Employment. The Participant understands and agrees that, if he or she is subject to exchange control laws and regulations in the People's Republic of China ("PRC") (as determined by the Company in its sole discretion), paragraph 1.M. of the Agreement is deleted in its entirety and replaced with the following provision:

M. If the Participant's employment with the Company, the Employer or any Subsidiary terminates prior to the Vesting Date but, on or after the first anniversary of the Date of Grant because of retirement, disability or job elimination, including termination of employment with by the Company due to a divestiture, each as determined in the Committee's sole discretion, or death, the Participant shall be entitled to the same Award to which the Participant would have been entitled had the Participant's employment continued through the Vesting Date, and such Award shall be paid as soon as practicable following the Vesting Date, subject to paragraph 2.C.; provided, however, that the Committee, in its sole discretion, may determine that the Participant will be entitled to a lesser Award. Notwithstanding the foregoing, if the Payout Date (as defined in paragraph 2.C.) is more than six (6) months after the termination date, the Participant shall surrender all unvested Restricted Stock Units and, in exchange therefore, the Participant will receive a cash payment equal in value to the Award to which the Participant would have been entitled had the Participant's employment continued through the Vesting Date, and such cash payment shall be paid as soon as practicable following the Participant's termination date. For purposes of the foregoing, the amount of any cash to be paid in lieu of Common Stock shall be determined on the basis of the Fair Market Value of the Common Stock as of the date on which it is paid.

Exchange Control Restrictions. To facilitate compliance with any applicable laws or regulations in the PRC, the Participant agrees to the sale of any shares of Common Stock to be issued upon vesting and settlement of the Award. The sale will occur (i) immediately upon vesting and settlement of the Award, (ii) following the Participant's termination of employment with the Employer, the Company or a Subsidiary, or (iii) within any other time frame as the Company determines to be necessary to facilitate compliance with local regulatory requirements. The Participant further agrees that the Company is authorized to instruct its designated broker to assist with the mandatory sale of such shares (on the Participant's behalf pursuant to this authorization) and the Participant expressly authorizes the Company's designated broker to complete the sale of such shares. The Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the shares at any particular price. Upon the sale of

the shares, the Company agrees to pay the Participant the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy Tax-Related Items. The Participant agrees that the payment of the cash proceeds will be subject to the repatriation requirements described below.

The Participant further agrees that any shares to be issued to the Participant shall be deposited directly into an account with the Company's designated broker. The deposited shares shall not be transferable (either electronically or in certificate form) from the brokerage account. This limitation shall apply both to transfers to different accounts with the same broker and to transfers to other brokerage firms. The limitation shall apply to all shares issued to the Participant under the Plan, whether or not the Participant continues to be employed by the Company or one of its Subsidiaries. If the Participant sells shares issued upon vesting and settlement of the Award, the repatriation requirements described below shall apply.

The Participant understands and agrees that, if he or she is subject to exchange control laws and regulations in the PRC (as determined by the Company in its sole discretion), the Participant will be required to repatriate the proceeds from the sale of shares of Common Stock and any dividends or Dividend Equivalents received in relation to the shares to the PRC. The Participant further understands that, under local law, such repatriation of his or her cash proceeds may need to be effectuated through a special exchange control account established by the Company, a Subsidiary or the Employer, and the Participant hereby consents and agrees that any proceeds from the sale of any shares, dividends or Dividend Equivalents the Participant receives may be transferred to such special account prior to being delivered to the Participant. The Participant also agrees to sign any agreements, forms and/or consents that may be reasonably requested by the Company (or the Company's designated brokerage firm) to effectuate such transfers and shall otherwise cooperate with the Company with respect to exchange control matters. The proceeds may be paid to the Participant in U.S. dollars or local currency at the Company's discretion. If the proceeds are paid to the Participant in U.S. dollars, the Participant understands that he or she will be required to set up a U.S. dollar bank account in China so that the proceeds may be deposited into this account. If the proceeds are paid to the Participant in local currency, the Participant acknowledges that the Company is under no obligation to secure any particular exchange conversion rate and that the Company may face delays in converting the proceeds to local currency due to exchange control restrictions. The Participant agrees that, if required by the Company, he or she will bear any currency fluctuation risk between the time the proceeds are received and the time (i) the Tax-Related Items are converted to local currency and remitted to the tax authorities and/or (ii) the net proceeds are converted to local currency and distributed to the Participant. The Participant further agrees to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

Colombia

Labor Law Acknowledgement. By accepting the Award, the Participant acknowledges that pursuant to Article 128 of the Colombia Labor Code, the Plan and related benefits do not constitute a component of "salary" for any purposes. To this extent, the Participant understands they will not be included and/or considered for purposes of calculating any and all labor benefits, such as legal/fringe benefits, vacations, indemnities, payroll taxes, social insurance contributions and/or any other labor-related amount that may be payable.

Securities Law Notice. The shares of Common Stock are not and will not be registered in the Colombian registry of publicly traded securities (Registro Nacional de Valores y Emisores) and therefore the shares may not be offered to the public in Colombia. Nothing in this document should be construed as the making of a public offer of securities in Colombia.

Costa Rica

There are no country-specific provisions.

Czech Republic

There are no country-specific provisions.

Denmark

Danish Stock Option Act. By accepting this Award, the Participant acknowledges that he or she has received a Danish translation of an Employer Statement, which includes a description of the treatment applicable to the Restricted Stock Units upon a Termination, as required by the Danish Act on the Use of

Rights to Purchase or Subscribe for Shares etc. in Employment Relationships (the "Stock Option Act"), to the extent the Stock Option Act applies to the Restricted Stock Units. The Employer Information Statement is accessible in the Document Library section of the Fidelity Stock Plan Services, LLC website at www.fidelity.com.

Egypt

There are no country-specific provisions.

Estonia

There are no country-specific provisions.

Finland

There are no country-specific provisions.

France

Language Consent. By clicking on the "I accept" button or by signing and returning this document providing for the terms and conditions of the grant, the Participant confirms having read and understood the documents relating to this grant (the Plan and this Agreement) which were provided to the Participant in the English language. The Participant accepts the terms of those documents accordingly.

En cliquant sur le bouton "J'accepte" ou en signant et renvoyant le présent document décrivant les termes et conditions de cette attribution, le Participant confirme avoir lu et compris les documents relatifs à cette attribution (le Plan et ce Contrat) qui ont été communiqués au Participant en langue anglaise. Le Participant en accepte les termes en connaissance de cause.

Germany

Foreign Asset / Account Reporting Information. German residents holding shares of Common Stock must notify their local tax office of the acquisition of Common Stock when they file their tax returns for the relevant year if the resident holds at least 1% of the Company and the value of the shares for all Common Stock acquired exceeds EUR 150,000 or the resident holds Common Stock exceeding 10% of the Company's total Common Stock.

Greece

There are no country-specific provisions.

Guatemala

There are no country-specific provisions.

Hong Kong

Securities Law Notice. The grant of an Award and the shares of Common Stock to be issued upon settlement of an Award do not constitute a public offer of securities and are available only to employees of the Company or a Subsidiary or affiliate.

WARNING: The Participant should be aware that the contents of the Agreement, including this Appendix, and the Plan and other incidental communication materials have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong nor have the documents been reviewed by any regulatory authority in Hong Kong. The Restricted Stock Units are intended only for the personal use of each eligible employee of the Company, its Subsidiaries and affiliates and may not be distributed to any other person. If the Participant is in any doubt about any of the contents of the Agreement, including this Appendix, or the Plan, the Participant should obtain independent professional advice.

Occupational Retirement Schemes Ordinance Notification. The Company specifically intends that the Plan will not be an occupational retirement scheme for purposes of the Occupational Retirement Schemes Ordinance.

Hungary

There are no country-specific provisions.

India

Exchange Control Notice. The Participant must repatriate any proceeds from the sale of shares of Common Stock or the receipt of dividends paid on such shares of Common Stock to India within such period of time as may be required under applicable regulations. The Participant should obtain evidence of the repatriation of funds in the form of a foreign inward remittance certificate ("FIRC") from the bank where the Participant deposits the foreign currency. The Participant should maintain the FIRC as evidence of the repatriation of funds in the event the Reserve Bank of India or the Employer requests proof of repatriation. The Participant is also responsible for complying with any other exchange control laws in India that may apply to the Restricted Stock Units or the shares of Common Stock acquired under the Plan.

Indonesia

Language Consent and Notification. By accepting the Restricted Stock Units, the Participant (i) confirms having read and understood the documents relating to the grant (i.e., the Plan and the Agreement) which were provided in the English language, (ii) accepts the terms of those documents accordingly, and (iii) agrees not to challenge the validity of this document based on Law No. 24 of 2009 on National Flag, Language, Coat of Arms and National Anthem or the implementing Presidential Regulation (when issued).

Persetujuan dan Pemberitahuan Bahasa. *Dengan menerima pemberian Unit Saham Terbatas ini, Peserta (i) memberikan konfirmasi bahwa dirinya telah membaca dan memahami dokumen-dokumen berkaitan dengan pemberian ini (Pemberitahuan Pemberian, Perjanjian Penghargaan dan Program) yang disediakan dalam Bahasa Inggris, (ii) menerima persyaratan di dalam dokumen-dokumen tersebut, dan (iii) setuju untuk tidak mengajukan keberatan atas keberlakuan dari dokumen ini berdasarkan Undang-Undang No. 24 Tahun 2009 tentang Bendera, Bahasa dan Lambang Negara serta Lagu Kebangsaan ataupun Peraturan Presiden sebagai pelaksanaannya (ketika diterbitkan).*

Italy

Plan Document Acknowledgement. In accepting the Award, the Participant acknowledges that the Participant has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix.

The Participant further acknowledges that the Participant has read and specifically and expressly approves the following paragraphs of the Agreement: Terms and Conditions of the Award; Applicable Law; Entire Agreement; Venue; Taxes; Electronic Delivery and Acceptance; Data Privacy; Language; Imposition of Other Requirements and Appendix.

Japan

Exchange Control Notice. If the Participant acquires shares valued at more than JPY 100 million in a single transaction, the Participant must file a Securities Acquisition Report with the Ministry of Finance through the Bank of Japan within 20 days after the acquisition of the shares.

Kazakhstan

Securities Law Notice. This offer is addressed only to certain eligible employees in the form of shares of Common Stock to be issued by the Company. The Plan and the Agreement have not been approved, nor do they need to be approved, by the National Bank of Kazakhstan. The offer is intended only for the original recipient and is not for general circulation in the Republic of Kazakhstan.

Latvia

There are no country-specific provisions.

Lithuania

There are no country-specific provisions.

Malaysia

Data Privacy Notice. Notwithstanding any provision of the Agreement, this paragraph in the Appendix applies in regards to data privacy in Malaysia.

The Participant hereby explicitly, voluntarily and unambiguously consents to the collection, use and transfer, in electronic or other form, of his or her personal data as described in this Agreement and any other Plan participation materials by and among, as applicable, the Employer, the Company and any Subsidiary or any third parties authorized by same in assisting in the implementation, administration and management of the Participant's participation in the Plan. The Participant may have previously provided the Company and the Employer with, and the Company and the Employer may hold, certain personal information about the Participant, including, but not limited to, his or her name, home address and telephone number, email address, date of birth, social insurance number, passport or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, the fact and conditions of the Participant's participation in the Plan, details of all Restricted Stock Units or any other entitlement to shares of stock awarded, cancelled,	Pesertadengan ini secara eksplisit, secara sukarela dan tanpa sebarang keraguan mengizinkan pengumpulan, penggunaan dan pemindahan, dalam bentuk elektronik atau lain-lain, data peribadinya seperti yang dinyatakan dalam Perjanjia ini dan apa-apa bahan Pelan penyertaan oleh dan di antara Majikan, Syarikat dan mana-mana Syarikat Induk atau Anak Syarikat atau mana-mana pihak ketiga yang diberi kuasa oleh yang sama untuk membantu dalam pelaksanaan, pentadbiran dan pengurusan penyertaan Peserta dalam Pelan tersebut. Sebelum ini, Peserta mungkin telah membekalkan Syarikat dan Majikan dengan, dan Syarikat dan Majikan mungkin memegang, maklumat peribadi tertentu tentang Peserta, termasuk, tetapi tidak terhad kepada, namanya, alamat rumah dan nombor telefon, alamat emal, tarikh lahir, nombor insurans sosial, pasport atau nombor pengenalan lain, gaji, kewarganegaraan, jawatan, apa-apa saham atau jawatan pengarah yang dipegang dalam Syarikat, fakta dan syarat-syarat penyertaan

exercised, vested, unvested or outstanding in the Participant's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan.

The Participant also authorizes any transfer of Data, as may be required, to such stock plan service provider as may be selected by the Company from time to time, which is assisting the Company with the implementation, administration and management of the Plan and/or with whom any shares of Common Stock acquired upon settlement of the Restricted Stock Units are deposited. The Participant acknowledges that these recipients may be located in the Participant's country or elsewhere, and that the recipient's country (e.g., the United States) may have different data privacy laws and protections to the Participant's country, which may not give the same level of protection to Data. The Participant understands that he or she may request a list with the names and addresses of any potential recipients of Data by contacting his or her local human resources representative. The Participant authorizes the Company, the stock plan service provider and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Participant's participation in the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purpose of implementing, administering and managing Participant's participation in the Plan. Participant understands that Data will be held only as long as is necessary to implement, administer and manage his or her participation in the Plan. The Participant understands that he or she may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case, without cost, by contacting in writing his or her local human resources representative, whose contact details are [insert]. Further, the Participant understands that he or she is providing the consents herein on a purely voluntary basis. If the Participant does not consent, or if the Participant later seeks to revoke the consent, his or her employment status or service and career with the Employer will not be adversely affected; the only adverse consequence of refusing or withdrawing the consent is that the Company would not be able to grant future Restricted Stock Units or other equity awards to the Participant or administer or maintain such awards. Therefore, the Participant understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan. For more information on the consequences of the refusal to consent or withdrawal of consent, the Participant understands that he or she may contact his or her local human resources representative.

Peserta dalam Pelan tersebut, butir-butir semua Unit-unit Saham Terbatas atau apa-apa hak lain untuk saham yang dianugerahkan, dibatalkan, dilaksanakan, terletak hak, tidak diletak hak ataupun bagi faedah Peserta ("Data"), untuk tujuan yang eksklusif bagi melaksanakan, mentadbir dan menguruskan Pelan tersebut.

Peserta juga memberi kuasa untuk membuat apa-apa pemindahan Data, sebagaimana yang diperlukan, kepada pembekal perkhidmatan pelan saham yang lain sebagaimana yang dipilih oleh Syarikat dari semasa ke semasa, yang membantu Syarikat dalam pelaksanaan, pentadbiran dan pengurusan Pelan dan/atau dengan sesiapa yang mendepositkan Saham-Saham yang diperolehi melalui penyelesaian Unit-unit Saham Terbatas. Peserta mengakui bahawa penerima-penerima ini mungkin berada di negara Peserta atau di tempat lain, dan bahawa negara penerima (contohnya, Amerika Syarikat) mungkin mempunyai undang-undang privasi data dan perlindungan yang berbeza daripada negara Peserta, yang mungkin tidak boleh memberi tahap perlindungan yang sama kepada Data. Pesertafaham bahawa dia boleh meminta senarai nama dan alamat mana-mana penerima Data dengan menghubungi wakil sumber manusia tempatannya . Peserta memberi kuasa kepada Syarikat, pembekal perkhidmatan pelan saham dan mana-mana penerima lain yang mungkin membantu Syarikat (masa sekarang atau pada masa depan) untuk melaksanakan, mentadbir dan menguruskan penyertaan Peserta dalam Pelan tersebut untuk menerima, memiliki, menggunakan, mengekalkan dan memindahkan Data, dalam bentuk elektronik atau lain-lain, semata-mata dengan tujuan untuk melaksanakan, mentadbir dan menguruskan penyertaan Peserta dalam Pelan tersebut. Peserta faham bahawa Data akan dipegang hanya untuk tempoh yang diperlukan untuk melaksanakan, mentadbir dan menguruskan penyertaannya dalam Pelan tesebut. Peserta faham bahawa dia boleh, pada bila-bila masa, melihat data, meminta maklumat tambahan mengenai penyimpanan dan pemprosesan Data, meminta bahawa pindaan-pindaan dilaksanakan ke atas Data atau menolak atau menarik balik persetujuan dalam ini, dalam mana-mana kes, tanpa kos, dengan menghubungi secara bertulis wakil sumber manusia tempatannya , di mana butir-butir hubungannya adalah, [insert]. Selanjutnya, Peserta memahami bahawa dia memberikan persetujuan di sini secara sukarela. Jika Peserta tidak bersetuju, atau jika Peserta kemudian membatalkan persetujuannya, status pekerjaan atau perkhidmatan dan kerjayanya dengan Majikan tidak akan terjejas; satunya akibat buruk jika dia tidak bersetuju atau menarik balik persetujuannya adalah bahawa Syarikat tidak akan dapat memberikan Unit-unit Saham Terbatas pada

	masa depan atau anugerah ekuiti lain kepada Peserta atau mentadbir atau mengekalkan anugerah-anugerah tersebut. Oleh itu, Peserta faham bahawa keengganan atau penarikan balik persetujuannya boleh menjejaskan keupayaannya untuk mengambil bahagian dalam Pelan tesebut. Untuk maklumat lanjut mengenai akibat keengganan untuk memberikan keizinan atau penarikan balik keizinan, Peserta fahami bahawa dia boleh menghubungi wakil sumber manusia tempatannya .

Director Notification Obligation. If the Participant is a director of the Company's Malaysian Subsidiary, the Participant is subject to certain notification requirements under the Malaysian Companies Act. Among these requirements is an obligation to notify the Malaysian Subsidiary in writing when the Participant receives or disposes of an interest (e.g., Restricted Stock Units, shares of Common Stock) in the Company or any related company. Such notifications must be made within 14 days of receiving or disposing of any interest in the Company or any related company.

Mexico

Labor Law Policy and Acknowledgement. In accepting the Award, the Participant expressly recognizes that PPG Industries, Inc., with registered offices at One PPG Place, Pittsburgh, Pennsylvania 15272, U.S.A., is solely responsible for the administration of the Plan and that the Participant's participation in the Plan and acquisition of shares of Common Stock do not constitute an employment relationship between the Participant and PPG Industries, Inc. since the Participant is participating in the Plan on a wholly commercial basis and the Participant's sole Employer is PPG INDUSTRIES de MEXICO S.A. de C.V. or Grupo Comex, S.A. de C.V ("PPG-Mexico"). Based on the foregoing, the Participant expressly recognizes that the Plan and the benefits that the Participant may derive from participating in the Plan do not establish any rights between the Participant and the Employer, PPG-Mexico, and do not form part of the employment conditions and/or benefits provided by PPG-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of the Participant's employment.

The Participant further understands that the Participant's participation in the Plan is as a result of a unilateral and discretionary decision of PPG Industries, Inc.; therefore, PPG Industries, Inc. reserves the absolute right to amend and/or discontinue the Participant's participation at any time without any liability to the Participant.

Finally, the Participant hereby declares that the Participant does not reserve to the Participant any action or right to bring any claim against PPG Industries, Inc. for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and the Participant therefore grants a full and broad release to PPG Industries, Inc., its affiliates, branches, representation offices, its shareholders, directors, officers, agents or legal representatives with respect to any claim that may arise.

Reconocimiento de Ausencia de Relación Laboral y Declaración de la Política. *Aceptando este Premio, el Participante reconoce que PPG Industries, Inc. y sus oficinas registradas en One PPG Place, Pittsburgh, Pennsylvania, U.S.A., es el único responsable de la administración del Plan y que la participación del Participante en el mismo y la adquisición de Acciones no constituye de ninguna manera una relación laboral entre el Participante y PPG Industries, Inc., toda vez que la participación del Participante en el Plan deriva únicamente de una relación comercial con PPG Industries, Inc., reconociendo expresamente que el único empleador del Participante lo es PPG INDUSTRIES de MEXICO S.A. de C.V. o Grupo Comex, S.A. de C.V ("PPG-Mexico"). Derivado de lo anterior, el Participante expresamente reconoce que el Plan y los beneficios que pudieran derivar del mismo no establecen ningún derecho entre el Participante y su empleador, PPG-México, y no forman parte de las condiciones laborales y/o prestaciones otorgadas por PPG-México, y expresamente el Participante reconoce que cualquier modificación al Plan o la terminación del mismo de manera alguna podrá ser interpretada como una modificación de los condiciones de trabajo del Participante.*

Asimismo, el Participante entiende que su participación en el Plan es resultado de la decisión unilateral y discrecional de PPG Industries, Inc., por lo tanto, PPG Industries, Inc. se reserva el derecho absoluto

para modificar y/o terminar la participación del Participante en cualquier momento, sin ninguna responsabilidad para el Participante.

Finalmente, el Participante manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de PPG Industries, Inc., por cualquier compensación o daño en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia el Participante otorga un amplio y total finiquito a PPG Industries, Inc., sus Entidades Relacionadas, afiliadas, sucursales, oficinas de representación, sus accionistas, directores, agentes y representantes legales con respecto a cualquier demanda que pudiera surgir.

Morocco

Settlement. Unless otherwise determined by the Committee, the Participant is not entitled to receive any shares of Common Stock upon vesting of the Restricted Stock Units due to exchange control regulations in Morocco. This means that upon vesting of the Restricted Stock Units, the Participant will receive a cash payment equal to the value of the underlying shares of Common Stock at vesting, less any Tax-Related Items, which will be remitted to the Participant via local payroll. Any references in the Plan and this Agreement to the issuance of shares shall not apply to the Participant.

Netherlands

There are no country-specific provisions.

New Caledonia

There are no country-specific provisions.

New Zealand

Securities Law Notice. Warning: This is an offer of rights to receive shares of Common Stock in accordance with the terms of the Plan and this Agreement. The shares of Common Stock, once acquired, will give the Participant a stake in the ownership of the Company. The Participant may receive a return if dividends are paid on the shares of Common Stock. If the Company runs into financial difficulties and is wound up, the Participant will be paid only after all creditors have been paid. The Participant may lose some or all of his or her investment.

New Zealand law normally requires people who offer financial products to give information to investors before they invest. This information is designed to help investors to make an informed decision. The usual rules do not apply to this offer because it is made under an employee share scheme. As a result, the Participant may not be given all the information usually required. The Participant will also have fewer other legal protections for this investment.

The Participant should ask questions, read all documents carefully, and seek independent financial advice before committing him- or herself. The shares of Common Stock are quoted on the New York Stock Exchange, and the Participant may be able to sell them on the New York Stock Exchange if there are interested buyers. The Participant may get less than the Participant invested. The price will depend on the demand for the shares of Common Stock.

For information on risk factors impacting the Company's business that may affect the value of the shares of Common Stock, the Participant should refer to the risk factors discussion in the Company's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are filed with the U.S. Securities and Exchange Commission and are available online at www.sec.gov, as well as on the Company's "Investor Center" website at http://investor.ppg.com/.

Nigeria

There are no country-specific provisions.

Norway

There are no country-specific provisions.

Panama

Securities Law Notice. The Restricted Stock Units and any shares of Common Stock which may be issued to the Participant upon vesting and settlement of the Restricted Stock Units do not constitute a public offering of securities, as they are available only to eligible employees of the Company and its Subsidiaries.

Philippines

Settlement. Unless otherwise determined by the Committee, the Participant is not entitled to receive any shares of Common Stock upon vesting of the Restricted Stock Units due to regulatory requirements in the Philippines. This means that upon vesting of the Restricted Stock Units, the Participant will receive a cash payment equal to the value of the underlying shares of Common Stock at vesting, less any Tax-Related Items, which will be remitted to the Participant via local payroll. Any references in the Plan and this Agreement to the issuance of shares shall not apply to the Participant.

Poland

Exchange Control Notice. If the Participant holds foreign securities (including shares of Common Stock acquired under the Plan) and maintains accounts abroad, the Participant may be required to file certain reports with the National Bank of Poland. If the Participant transfers funds in excess of EUR 15,000 into Poland, the funds must be transferred via a Polish bank account or financial institution. The Participant is required to retain the documents connected with a foreign exchange transaction for a period of five (5) years, as measured from the end of the year in which such transaction occurred. The Participant should consult with his or her personal legal advisor to determine what he or she must do to fulfill any applicable reporting duties.

Portugal

Language Consent. The Participant hereby expressly declares that he or she has full knowledge of the English language and has read, understood and freely accepted and agreed with the terms and conditions established in the Plan and the Agreement.

Conhecimento da Língua. Pela presente, o Participante declara expressamente que tem pleno conhecimento da língua inglesa e que leu, compreendeu e livremente aceitou e concordou com os termos e condições estabelecidas no Plano e no Acordo.

Exchange Control Notice. If the Participant acquires shares of Common Stock under the Plan and does not hold the shares of Common Stock with a Portuguese financial intermediary, the Participant may need to file a report with the Portuguese Central Bank. If the shares of Common Stock are held by a Portuguese financial intermediary, it will file the report for the Participant.

Republic of Korea

Foreign Asset/Account Reporting Information. If the Participant is a Korean resident, the Participant must declare all of his or her foreign financial accounts (e.g., non-Korean bank accounts, brokerage accounts, etc.) to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds KRW 500 million (or an equivalent amount in foreign currency). The Participant should consult with his or her personal tax advisor to determine the Participant's personal reporting obligations.

Domestic Broker/Exchange Control Information. Korean residents may not be permitted to sell foreign securities (such as the shares of Common Stock) through non-Korean brokers (such as Fidelity Stock Plan Services, LLC) or deposit funds resulting from the sale of shares of Common Stock in an overseas financial institution. Therefore, prior to selling the shares of Common Stock acquired under the Plan, the Participant may be required to transfer such shares to a domestic investment broker. The Participant acknowledges that the Participant is solely responsible for complying with the exchange control laws in Korea including the engagement of a domestic broker. Because the exchange control regulations may change without notice, the Participant should consult with a legal advisor to ensure compliance with any exchange control regulations applicable to any aspect of their participation in the Plan.

Romania

Language Consent. The Participant hereby expressly agrees that the Agreement, the Plan as well as all documents, notices and proceedings entered into, relating directly or indirectly hereto, be drawn up or communicated only in the English language.

Angajatul consimte în mod expres prin prezentul ca acest Contract, Programul precum şi orice alte documente, notificări, înştiinţări legate direct sau indirect de acest Contract să fie redactate sau efectuate doar în limba engleză.

Russia

Securities Law Notice. The Plan and all other materials the Participant may receive regarding the Restricted Stock Units and participation in the Plan do not constitute advertising or an offering of securities in Russia. In no event will shares of Common Stock acquired upon vesting of the Restricted Stock Units be delivered to the Participant in Russia; all shares acquired upon vesting of the Restricted Stock Units will be maintained on the Participant's behalf outside of Russia (e.g., in a brokerage account in the United States). The shares of Common Stock to be issued upon vesting of the Restricted Stock Units have not and will not be registered in Russia and, therefore, the shares of Common Stock described in any Plan documents may not be offered or placed in public circulation in Russia. The Participant is not permitted to sell shares of Common Stock directly to a Russian legal entity or resident.

Exchange Control Notice. Under exchange control regulations in Russia, the Participant may be required to repatriate certain cash amounts the Participant receives with respect to the Restricted Stock Units to Russia as soon as the Participant intends to use those cash amounts for any purpose, including reinvestment. If the repatriation requirements apply, such funds must initially be credited to the Participant through a foreign currency account at an authorized bank in Russia. After the funds are initially received in Russia, they may be further remitted to foreign banks in accordance with Russian exchange control laws.

However, the repatriation requirement may not apply with respect to cash amounts received in an account that is considered by the Central Bank of Russia to be a foreign brokerage account opened with a financial market institution other than a bank. Statutory exceptions to the repatriation requirement also may apply. The Participant should consult with his or her personal legal advisor to determine his or her exchange control obligations.

Foreign Asset/Account Reporting Information. Russian residents are required to notify Russian tax authorities within one (1) month of opening, closing or changing the details of a foreign bank or brokerage account. Russian residents also are required to report (i) the beginning and ending balances in such a foreign account each year and (ii) transactions related to such a foreign account during the year to the Russian tax authorities, on or before June 1 of the following year. The tax authorities can require the Participant to provide appropriate supporting documents related to transactions in a foreign bank account. The Participant should consult with his or her personal advisor before remitting any sale proceeds or other amounts related to the Plan (e.g., Dividend Equivalents) to Russia, as such requirements may change.

Anti-Corruption Legislation Information. Individuals holding public office in Russia, as well as their spouses and dependent children, may be prohibited from opening or maintaining a foreign brokerage or bank account and holding any securities, whether acquired directly or indirectly, in a foreign company (including shares of Common Stock acquired under the Plan). The Participant should consult with his or her personal legal advisor to determine whether this restriction applies to the Participant's circumstances.

Labor Law Notice. If the Participant continues to hold shares of Common Stock acquired under the Plan after an involuntary termination of the Participant's employment, he or she will not be eligible to receive unemployment benefits in Russia.

Serbia

Securities Law Notice. The grant of the Restricted Stock Units is not subject to the regulations concerning public offers and private placements under the Law on Capital Markets.

Singapore

Restrictions on Sale and Transferability. The Participant hereby agrees that any shares of Common Stock acquired pursuant to the Restricted Stock Units will not be offered for sale in Singapore prior to the six-month anniversary of the Date of Grant, unless such sale or offer is made pursuant to the exemption under Part XIII Division I Subdivision (4) (other than section 280) of the Securities and Futures Act (Chap. 289, 2006 Ed.) ("SFA"), or pursuant to, and in accordance with the conditions of, any other applicable provision(s) of the SFA.

Securities Law Notice. The grant of the Restricted Stock Units is being made in reliance on section 273(1)(f) of the SFA, on which basis it is exempt from the prospectus and registration requirements under the SFA, and is not made to the Participant with a view to the Restricted Stock Units or underlying shares of Common Stock being subsequently offered for sale to any other party. The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Obligation. If the Participant is a director (including alternate, substitute, associate and shadow director[1]) of a Singapore Subsidiary, as these terms are used in the Singapore Companies Act (the "SCA"), the Participant agrees to comply with notification requirements under the SCA. Among these requirements is an obligation to notify the Singapore Subsidiary in writing when the Participant receives or disposes of an interest (e.g., Restricted Stock Units, shares of Common Stock) in the Company or any related company. These notifications must be made within two business days of acquiring or disposing of any interest in the Company or any related company or within two business days of becoming a director if such an interest in the Company or any related company exists at the time.

Slovakia

There are no country-specific provisions.

Slovenia

There are no country-specific provisions.

South Africa

Securities Law Notice. Neither the Restricted Stock Units nor the underlying shares of Common Stock shall be publicly offered or listed on any stock exchange in South Africa. The offer is intended to be private pursuant to Section 96(1)(g)(ii) of the Companies Act, 71 of 2008 and is not subject to the supervision of any South African governmental authority.

Spain

Terms and Conditions of the Plan. This provision supplements the Terms and Conditions of the Award paragraph of the Agreement:

In accepting the Award, the Participant acknowledges that the Participant consents to participation in the Plan and has received a copy of the Plan.

The Participant understands that the Company, in its sole discretion, has unilaterally and gratuitously decided to grant Awards under the Plan to individuals who may be employees of the Company or a Subsidiary throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Employer on an ongoing basis. Consequently, the Participant understands that the Award is granted on the assumption and condition that the Award and the shares of Common Stock issued upon settlement of the Award shall not become a part of any employment contract (either with the Company or a Subsidiary) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. In addition, the Participant understands that the grant of the Award would not be made to the Participant but for the assumptions and conditions referred to above; thus, the Participant acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then any grant of an Award shall be null and void.

[1] A shadow director is an individual who is not on the board of directors of a company but who has sufficient control so that the board of directors acts in accordance with the "directions or instructions" of the individual.

If a Participant's employment is terminated for any reason (including termination by the Company or a Subsidiary without cause or another termination of employment caused directly or indirectly by the Company or a Subsidiary) other than retirement, disability, job elimination, including termination of employment by the Company due to a divestiture, each as determined in the Committee's discretion, or death, the Participant forfeits all rights to the Award.

Securities Law Notice. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory in connection with the Award. The Agreement has not nor will it be registered with the Comision Nacional del Mercado de Valores, and does not constitute a public offering prospectus.

Suriname

There are no country-specific provisions.

Sweden

Taxes. The following supplements the Taxes paragraph of the Agreement:

Without limiting the Company's and the Employer's authority to satisfy their withholding obligations for Tax-Related Items as set forth in the Taxes paragraph of the Agreement, in accepting the Restricted Stock Units, the Participant authorizes the Company and/or the Employer to sell or withhold or sell shares of Common Stock otherwise deliverable to the Participant upon vesting to satisfy Tax-Related Items, regardless of whether the Company and/or the Employer have an obligation to withhold such Tax-Related Items.

Switzerland

Securities Law Notice. Because this is a private offering in Switzerland, the Restricted Stock Units are not subject to registration in Switzerland. Neither this document nor any other materials relating to the Restricted Stock Units (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed or otherwise made publicly available in Switzerland to any person other than an employee of the Company or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority (*FINMA*).

Taiwan

Securities Law Notice. The Restricted Stock Units and the shares of Common Stock to be issued upon vesting/settlement of the Restricted Stock Units are available only for employees of the Company, its Subsidiaries and affiliates. The Award is not a public offer of securities by a Taiwanese company.

Exchange Control Notice. If the Participant is a resident of Taiwan (including an expatriate holding an Alien Resident Certificate), the Participant may acquire foreign currency and remit the same out of or into Taiwan up to US$5,000,000 per year without justification. If the Participant is an expatriate employee who does not have an Alien Resident Certificate, the Participant may remit into Taiwan and convert to local currency up to US$100,000 at each remittance with no annual limitation.

Thailand

Exchange Control Notice. The Participant may be required to immediately repatriate the proceeds from the sale of shares of Common Stock and any cash dividends or Dividend Equivalents received in relation to the shares to Thailand and convert the funds to Thai Baht within 360 days of repatriation if the proceeds realized in a single transaction exceed US$1,000,000 (unless the Participant can rely on any applicable exemptions (e.g., where the funds will be used offshore for any permissible purposes under exchange control regulations and the relevant form and supporting documents have been submitted to a commercial bank in Thailand)). In addition, the Participant must report the inward remittance by submitting the Foreign Exchange Transaction Form to the authorized agent. If the Participant fails to comply with these obligations, the Participant may be subject to penalties assessed by the Bank of Thailand. The Participant should consult his or her personal advisor before taking any action with respect to the remittance of proceeds from the sale of shares, any cash dividends or Dividend Equivalents into Thailand. It is the Participant's responsibility to comply with the Thailand exchange control laws, and

neither the Company nor the Employer will be liable for any fines or penalties resulting from failure to comply with applicable laws.

Turkey

Securities Law Notice. Under Turkish law, the Participant is not permitted to sell any shares of Common Stock acquired under the Plan in Turkey. The Shares are currently traded on the New York Stock Exchange, under the ticker symbol “PPG” and the shares of Common Stock may be sold through this exchange.

Exchange Control Notice. The Participant may be required to engage a Turkish financial intermediary to assist with the sale of shares of Common Stock acquired under the Plan. As the Participant is solely responsible for complying with any applicable financial intermediary requirements, the Participant should consider consulting his or her personal legal advisor prior to the vesting of the Restricted Stock Units or any sale of shares of Common Stock to ensure compliance.

United Arab Emirates

Securities Law Notice. The Restricted Stock Units granted under the Plan are being offered only to eligible employees of the Company and its Subsidiaries are in the nature of providing equity incentives to such employees. Any documents related to the Restricted Stock Units, including the Plan, Agreement, including this Appendix, and any other grant documents (“Award Documents”), are intended for distribution only to such eligible employees and must not be delivered to, or relied on by, any other person.

The Emirates Securities and Commodities Authority has no responsibility for reviewing or verifying any Award Documents or any other incidental communication materials distributed in connection with the Restricted Stock Units. Further, neither the Ministry of Economy nor the Dubai Department of Economic Development has approved the Award Documents or taken steps to verify the information set out in them, and thus, is not responsible for their content.

Participants should, as prospective stockholders, conduct their own due diligence on the securities. If the Participant does not understand the contents of the Award Documents, he or she should consult an authorized financial advisor.

United Kingdom

Taxes. The following supplements the Taxes paragraph of the Agreement:

Without limitation to the Taxes paragraph of the Agreement, the Participant agrees that the Participant is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items as and when requested by the Company or the Employer or by HM Revenue and Customs (“HMRC”) (or any other tax authority or any other relevant authority). The Participant also agrees to indemnify and keep indemnified the Company and the Employer against any Tax–Related Items that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on the Participant’s behalf.

Notwithstanding the foregoing, if the Participant is a director or executive officer of the Company (within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply. In such case, if the amount of any income tax due is not collected from or paid by the Participant within 90 days of the end of the UK tax year in which an event giving rise to the indemnification described above occurs, the amount of any uncollected income tax may constitute a benefit to the Participant on which additional income tax and national insurance contributions (“NICs”) may be payable. The Participant will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Employer for the value of any employee NICs due on this additional benefit, which the Company or the Employer may recover from the Participant at any time thereafter by any of the means referred to in this Agreement.

Uruguay

There are no country-specific provisions.

Vietnam

Settlement. Unless otherwise determined by the Committee, the Participant is not entitled to receive any shares of Common Stock upon vesting of the Restricted Stock Units due to exchange control regulations in Vietnam. This means that upon vesting of the Restricted Stock Units, the Participant will receive a cash payment equal to the value of the underlying shares of Common Stock at vesting, less any Tax-Related Items, which will be remitted to the Participant via local payroll. Any references in the Plan and this Agreement to the issuance of shares shall not apply to the Participant.

GRANT NOTICE FOR
NON-EMPLOYEE DIRECTOR RESTRICTED STOCK UNIT AWARD

PPG Industries, Inc. (the "Company") and the Participant identified below are parties to a Non-Employee Director Restricted Stock Unit Award Agreement dated as of **#GrantDate+C#** (the "Agreement"). Capitalized terms used in this Grant Notice shall have the respective meanings given to such terms in the Agreement, unless otherwise defined in this Grant Notice. This Grant Notice confirms the grant to the Participant of an Award of Restricted Stock Units with the terms set forth below. This Grant Notice is hereby incorporated by reference into and forms a part of the Agreement.

Participant Name:	#ParticipantName#
Date of Grant:	#GrantDate#
Number of Restricted Stock Units Granted:	#QuantityGranted#
Dividend Equivalents:	"Dividend Equivalents" are granted with respect to this Restricted Stock Unit Award and shall be credited to Participant in accordance with paragraph 1.B of the Agreement. "Dividend Equivalents" means the right to receive the equivalent value (in cash or shares) of dividends paid on one share of Common Stock for each share that may be issued under an Award.
Vesting Date:	#VestDate_1#
Forfeiture:	This Award shall be forfeited as of the date of any termination of the Participant's service as a member of the Board of the Company ("Director") if such termination occurs prior to the Vesting Date (as set forth above). Notwithstanding the foregoing (but subject to the continuing conditions provisions of paragraph 3 of the Agreement), the Award will no longer be subject to forfeiture (i) upon a Change in Control or (ii) if the Participant's service as a Director terminates (A) following the first anniversary of the Date of Grant and (B) such termination is not due to the Participant's resignation or removal as a Director at the request of a majority of the Board.

PPG Industries, Inc.

_____
By:

NON-EMPLOYEE DIRECTOR RESTRICTED STOCK UNIT AWARD AGREEMENT

This NON-EMPLOYEE DIRECTOR RESTRICTED STOCK UNIT AWARD AGREEMENT (this "Agreement") is entered into as of the date first written above by and between PPG Industries, Inc. (the "Company") and #ParticipantName+C# (the "Participant").

The Company maintains the PPG Industries, Inc. Omnibus Incentive Plan (as amended from time to time, the "Plan"), which is incorporated into and forms a part of this Agreement, and the Participant, a non-employee Director of the Company, has been selected by the Human Capital Management and Compensation Committee (the "Committee") to receive an Award under the Plan. Capitalized terms used in this Agreement shall, unless defined elsewhere in this Agreement, have the respective meanings given to such terms in the Plan.

The Award of Restricted Stock Units shall be confirmed by a separate Grant Notice to which this Agreement is attached ("Grant Notice"), specifying the Date of Grant of the Award, the number of Restricted Stock Units granted and the terms and conditions applicable to the vesting or forfeiture of such Restricted Stock Units. Each Restricted Stock Unit is a bookkeeping entry representing the equivalent in value of a share of Common Stock. Such Award shall be subject to the terms and conditions of this Agreement and such Grant Notice shall be deemed incorporated by reference into this Agreement.

NOW, THEREFORE, the Company and the Participant, intending to be legally bound, agree as follows:

1. Terms and Conditions of the Award.

A. This Agreement sets forth the terms and conditions applicable to the Award of Restricted Stock Units confirmed in the Grant Notice. The Award of Restricted Stock Units is made under Article VII of the Plan. Unless and until the Restricted Stock Units are vested in the manner set forth in the Grant Notice and paragraph 2.A. hereof, the Participant shall have no right to settlement of any such Restricted Stock Units.

B. On each date that the Company pays a dividend on its Common Stock prior to the payment of the Award, the Participant shall be entitled to a Dividend Equivalent on each Restricted Stock Unit subject to this Agreement. Unless prohibited under applicable law or otherwise determined by the Committee in its discretion, in the event and to the extent the Participant is permitted and elects to defer payment of the Restricted Stock Units subject to this Agreement, the value of such Dividend Equivalents shall be automatically deferred, on behalf of the Participant, into the Company's Deferred Compensation Plan for Directors. In the event such Dividend Equivalents are not so deferred, the Dividend Equivalents shall be paid to the Participant in the same form, based on the same record date and at the same time, as such dividend is paid by the Company on its Common Stock. For purposes of the time and form of payment requirements of Section 409A of the Code and the U.S. Treasury Regulations issued thereunder (collectively "Section 409A"), such Dividend Equivalents shall be treated separately from the Restricted Stock Units.

C. From the Date of Grant until the Restricted Stock Units become vested or are forfeited in accordance with the terms of the Grant Notice and this Agreement, the Restricted Stock Units granted under this Agreement shall be reflected in a bookkeeping account maintained by the Company.

D. Prior to settlement of any vested Restricted Stock Units, such Restricted Stock Units will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. The Company's obligations under this Agreement shall be unfunded and unsecured, and no special or separate fund shall be established, and no other segregation of assets shall be made, and the Participant shall have no greater rights than an unsecured general creditor of the Company. Except as otherwise specifically provided in the Grant Notice or this Agreement, the Participant shall have no rights as a stockholder of the Company by virtue of this Award unless and until such Award is determined to be vested and resulting shares of Common Stock are issued to the Participant. In addition, the Restricted Stock Units shall be subject to such restrictions as the Company may deem advisable under the rules, regulations and other requirements of the Securities and Exchange Commission, any stock exchange upon which Common Stock is then listed, and any applicable federal or state securities law.

2. Provisions Applicable to Settlement of Restricted Stock Unit Awards.

A. Upon attainment of the Vesting Date (as defined in the Grant Notice) without a forfeiture of the Restricted Stock Units, and upon the satisfaction of all other applicable conditions as to the issuance of the Restricted Stock Units (including the payment by the Participant of all applicable Tax-Related Items as defined in paragraph 7), the Restricted Stock Unit Award granted under this Agreement shall be settled by issuance to the Participant of shares of Common Stock equal to the number of Restricted Stock Units set forth in the Grant Notice.

B. Any shares of Common Stock issued to the Participant with respect to his or her Award shall be subject to such restrictions as the Committee may deem advisable under the rules, regulations and other requirements of the Securities and Exchange Commission, the New York Stock Exchange and any applicable state or foreign securities laws, and the Committee may cause a legend or legends to be endorsed on any stock certificates for such shares making appropriate references to such legal restrictions.

C. Except as otherwise provided in this Agreement, and except in the event the Participant is permitted and has made an election to defer payout of the Restricted Stock Units pursuant to the terms and conditions established by the Company, the issuance of the shares of Common Stock in accordance with the provisions of this paragraph 2 will be delivered within thirty (30) days following the Vesting Date. Payout of Restricted Stock Units that have been deferred shall be governed by the terms and conditions of the deferral election form. In addition, any distribution that becomes due under the terms of this Agreement will be delayed in the following circumstances: (i) if the Company reasonably anticipates that the distribution will violate Federal securities laws or other applicable law, provided that the distribution is made at the earliest date at which the Company reasonably anticipates that the distribution will no longer cause such violation; or (ii) upon such other events and conditions as the Commissioner of the Internal Revenue Service may prescribe in generally applicable guidance published in the Internal Revenue Bulletin.

3. Continuing Conditions. Notwithstanding any other provisions herein, the Participant, by execution of this Agreement, agrees and acknowledges that in return for the Award granted by the Company in this Agreement, the following continuing conditions shall apply:

A. If at any time prior to the Vesting Date or within one (1) year after the Vesting Date, without the prior written consent of the Company, the Participant engages in any activity in competition with any activity of the Company or any of its Subsidiaries, or contrary or harmful to the interests of the Company or any of its Subsidiaries, as determined in the sole discretion of the Board, including, but not limited to: (i) conduct related to the Participant's service as a Director of the Company for which either criminal or civil penalties against the Participant may be sought; (ii) violation of Company (or Subsidiary) code of ethics or similar policy ; (iii) accepting employment with or serving as a consultant, advisor or in any other capacity to an employer that is in competition with or acting against the interests of the Company or any of its Subsidiaries, including employing or recruiting any present, former or future employee of the Company or any of its Subsidiaries; (iv) disclosing or misusing any confidential information or material concerning the Company or any of its Subsidiaries; or (v) participating in a hostile takeover attempt, then this Award shall terminate effective as of the date on which the Participant enters into such activity, unless terminated sooner by operation of another term or condition of this Agreement, and any "Award Gain" realized by the Participant shall be paid by the Participant to the Company. "Award Gain" shall mean the cash and the Fair Market Value of the Common Stock delivered to the Participant pursuant to paragraph 2 on the date of such delivery times the number of shares so delivered. Any shares of Common Stock deferred by the Participant shall be considered to have been delivered for the purpose of this paragraph 3.

B. By accepting this Agreement, the Participant consents to a deduction from any amounts the Company or any of its Subsidiaries owes the Participant from time to time (including amounts owed the Participant as a retainer, wages or other compensation, fringe benefits or vacation pay, as well as any other amounts owed to the Participant by the Company or any of its Subsidiaries), to the extent of the amounts payable to the Company by the Participant under paragraph 3.A. above. Whether or not the Company elects to make

any set-off in whole or in part, if the Company does not recover by means of set-off the full amount payable by the Participant, calculated as set forth above, the Participant agrees to pay immediately the unpaid balance to the Company.

4. Award Subject to Plan Provisions. Unless otherwise expressly provided in the Grant Notice or this Agreement, the Restricted Stock Unit Award shall be subject to the provisions of the Plan, including, without limitation, Article XI. In the event of any conflict between this Agreement and either the Grant Notice or the Plan, the Grant Notice or Plan, as applicable, shall control over this Agreement.

5. Applicable Law; Entire Agreement; Venue. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without reference to any choice of law principles. The Grant Notice, this Agreement and the Plan contain all terms and conditions with respect to the subject matter hereof.

For purposes of litigating any dispute that arises under the Award or this Agreement, the parties hereby submit to and consent to the jurisdiction of the Commonwealth of Pennsylvania, and agree that such litigation shall be conducted in the courts of Allegheny County, Pennsylvania, or other federal courts for the United States for the Western District of Pennsylvania, and no other courts, where this Award of Restricted Stock Units is made and/or to be performed. The parties agree that, if suit is filed in Allegheny County courts, application will be made by one or both parties, without objection, to have the case heard in the Center for Commercial and Complex Litigation of the Court of Common Pleas of Allegheny County.

6. Further Assurances. The Participant agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver and perform all additional documents, instruments and agreements (including, without limitation, stock powers with respect to shares of Common Stock issued or otherwise distributed in relation to the Restricted Stock Units) which may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Grant Notice, this Agreement and the Plan.

7. Taxes. Regardless of any action the Company and/or the Subsidiary retaining the Participant (the “Service Recipient”) take with respect to any or all income tax (including U.S. federal, state, and local tax and/or non-U.S. tax), social insurance, payroll tax, payment on account or other tax-related withholding (“Tax-Related Items”), the Participant acknowledges that the ultimate liability for all Tax-Related Items legally due by the Participant is and remains the Participant’s responsibility and that the Company and/or the Service Recipient (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award, including the grant and vesting of the Restricted Stock Units, the conversion of the Restricted Stock Units into shares or the receipt of an equivalent cash payment, the subsequent sale of any shares acquired pursuant to the Restricted Stock Units and the receipt of any dividends or Dividend Equivalents; and (ii) do not commit to structure the terms of the grant or any aspect of the Award to reduce or eliminate the Participant’s liability for Tax-Related Items.

Prior to the relevant taxable event, the Participant shall pay or make adequate arrangements satisfactory to the Company and/or the Service Recipient to satisfy all Tax-Related Items.

In this regard, the Company will withhold in shares of Common Stock upon the relevant taxable or tax withholding event, as applicable, unless the use of such withholding method is problematic under applicable tax or securities law or has materially adverse accounting consequences, in which case, the obligation for Tax-Related Items may be satisfied by one or a combination of the following methods:

(i) arranging for the sale of shares of Common Stock acquired upon the vesting of the Award (on the Participant’s behalf and at the Participant’s direction pursuant to this authorization) and withholding from the cash proceeds; and /or
(ii) withholding from any wages or other cash compensation paid to the Participant by the Company and/or the Service Recipient or from any equivalent cash payment received in connection with the Award.

The Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates in the Participant’s jurisdictions(s). In the event of over-withholding, the Participant may receive a refund of any over-withheld amount in cash and will have no

entitlement to the equivalent in Common Stock or if not refunded, the Participant may seek a refund from the local tax authorities. In the event of under-withholding, the Participant may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Company. If the obligation for Tax-Related Items is satisfied by withholding a number of shares as described herein, the Participant shall be deemed, for tax purposes only, to have been issued the full number of shares of Common Stock subject to the vested portion of the Award, notwithstanding that a number of shares are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of the Award. The Participant shall pay to the Company and/or the Employer any amount of Tax-Related Items that is required to be withheld or accounted for in connection with the Restricted Stock Units that cannot be satisfied by the means previously described. The Company may refuse to deliver to the Participant any shares of Common Stock pursuant to the Award if the Participant fails to comply with his or her obligations in connection with the Tax-Related Items.

8. Transfer Restrictions. This Award and the Restricted Stock Units are not transferable other than by will or the laws of descent and distribution, and may not be assigned, hypothecated or otherwise pledged and shall not be subject to execution, attachment or similar process. Upon any attempt to effect any such disposition, or upon the levy of any such process, the Award shall immediately become null and void and the Restricted Stock Units shall be forfeited.

9. Capitalization Adjustments. The number of Restricted Stock Units awarded is subject to adjustment as provided in Section 11.07(a) of the Plan. The Participant shall be notified of such adjustment and such adjustment shall be binding upon the Company and the Participant.

10. Securities Law Compliance. Notwithstanding anything to the contrary contained herein, no shares of Common Stock shall be issued to the Participant upon vesting of this Restricted Stock Unit Award unless the Common Stock is then registered under the U.S. Securities Act of 1933, as amended (the “Securities Act”), or, if such Common Stock is not then so registered, the Company has determined that such vesting and issuance would be exempt from the registration requirements of the Securities Act. By accepting this Award, the Participant agrees not to sell any of the shares of Common Stock received under this Award at a time when the applicable laws or Company policies prohibit a sale.

11. Award Confers No Rights to Continued Service. Nothing contained in the Plan or this Agreement shall give the Participant the right to be retained in the service of the Company or any Subsidiary or affect the right of any such service recipient to terminate the Participant’s service.

12. Severability. If any provision of this Agreement shall be held to be illegal, invalid or unenforceable, that provision will be enforced to the maximum extent permissible and the legality, validity and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

13. Waiver. The Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach of this Agreement.

14. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to the Award or future awards under the Plan by electronic means or request the Participant’s consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

15. Code Section 409A. It is the intent that the Restricted Stock Units shall be exempt from or comply with the requirements of Section 409A, and any ambiguities herein will be interpreted in accordance with this intent. The Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify this Agreement as

may be necessary to ensure that all vesting or payouts provided under this Agreement are made in a manner that complies with Section 409A or to mitigate any additional tax, interest and/or penalties or other adverse tax consequences that may apply under Section 409A if compliance is not practical; provided, however, that nothing in this paragraph 15 creates an obligation on the part of the Company to modify the terms of this Agreement or the Plan, and the Company makes no representation that the terms of the Restricted Stock Units will comply with Section 409A or that payments under the Restricted Stock Units will not be subject to taxes, interest and penalties or other adverse tax consequences under Section 409A. In no event whatsoever shall the Company or any of its Subsidiaries or affiliates be liable to any party for any additional tax, interest or penalties that may be imposed on the Participant by Section 409A or any damages for failing to comply with Section 409A.

Director

_____
Director's Signature

PPG Industries, Inc.

_____
By:

Exhibit 13.1

PPG INDUSTRIES, INC. AND CONSOLIDATED SUBSIDIARIES
Market Information, Dividends, Holders of Common Stock and Stock Performance Graph
For the Year Ended December 31, 2023

Market Information

PPG common stock is traded on the New York Stock Exchange (symbol: PPG).

Quarterly Stock Market Price

	2023		2022	
Quarter Ended	**High**	**Low**	**High**	**Low**
March 31	$137.74	$120.90	$177.32	$111.32
June 30	$149.01	$130.65	$138.10	$107.06
September 30	$152.89	$126.94	$137.93	$109.78
December 31	$151.16	$120.33	$137.72	$107.40

Dividends

$ in millions, except per share data	2023		2022	
Month of Payment	**$**	**Per Share**	**$**	**Per Share**
March	$146	$0.62	$139	$0.59
June	146	0.62	140	0.59
September	153	0.65	145	0.62
December	153	0.65	146	0.62
Total	$598	$2.54	$570	$2.42

PPG has paid uninterrupted annual dividends since 1899. The latest quarterly dividend of 65 cents per share was approved by the board of directors on January 18, 2024, payable March 12, 2024 to shareholders of record February 16, 2024.

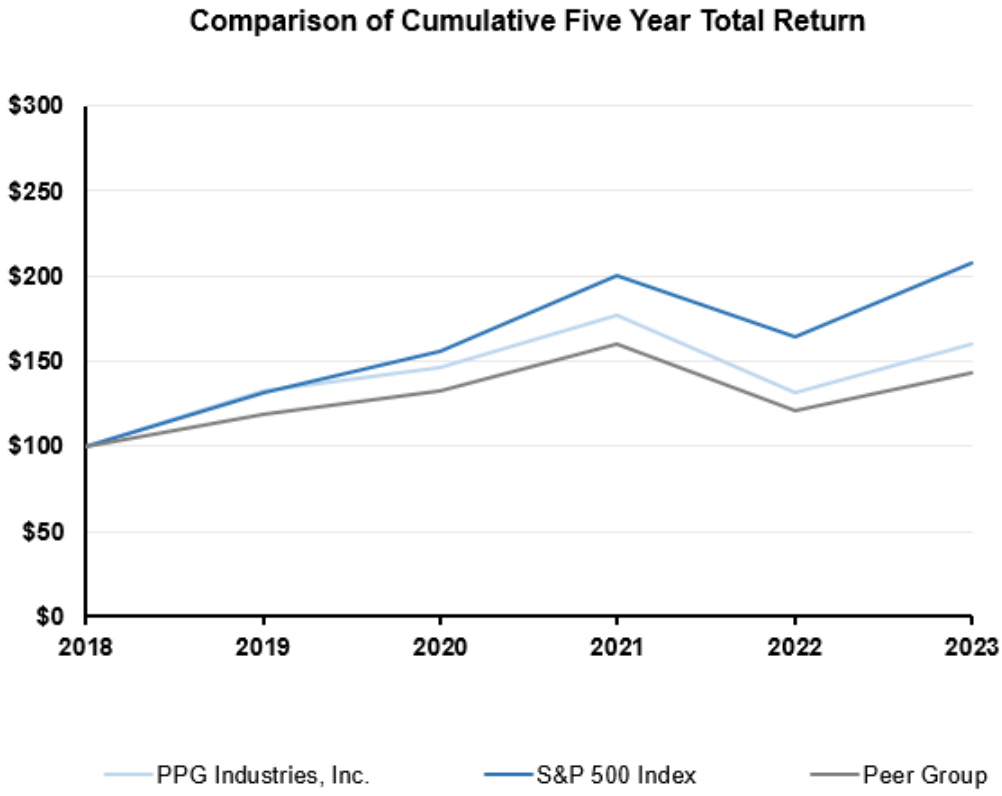
Holders of Common Stock

The number of holders of record of PPG common stock as of January 31, 2024 was 12,791 as shown on the records of the Company's transfer agent.

Stock Performance Graph

The following graph compares the yearly percentage changes in the cumulative total shareholder value return of the company's common stock with the cumulative total return of the Standard & Poor's Composite 500 Stock Index ("S&P 500") and a defined Peer Group, for the five-year period beginning December 31, 2018 and ending December 31, 2023. This graph assumes that the investment in the company's common stock and each index was $100 on December 31, 2018 and that all dividends were reinvested.

The Peer Group includes 3M Co., Akzo Nobel N.V., Axalta Coatings Systems Ltd., Dow, Inc., Dupont de Nemours, Inc., Eastman Chemical Co., Masco Corp., RPM International Inc., and The Sherwin-Williams Co.



The following table summarizes stock performance graph data points in dollars:

	December 31,					
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
PPG	$100	$133	$146	$177	$132	$160
S&P 500	$100	$131	$156	$200	$164	$207
Peer Group	$100	$119	$133	$160	$120	$143

PPG Industries, Inc.
And Consolidated Subsidiaries

Subsidiaries of the Registrant
December 31, 2023

Significant subsidiaries included in the 2023 consolidated financial statements of the Company are:

	Jurisdiction of Incorporation or Organization	Percentage of Voting Power
United States:		
AIPCF V Texstars Blocker Inc.	Delaware	100
Alpha Coatings, Inc.	Ohio	100
Cuming Microwave Corporation	Massachusetts	100
Dexmet Corporation	Delaware	100
Dexmet Holding Corporation	Delaware	100
Ennis Canadian Holding Company	Texas	100
Ennis-Flint, Inc.	North Carolina	100
Metokote Corporation	Delaware	100
Metokote Mexico Holdings, Inc.	Ohio	100
Polymeric Systems, Inc.	Delaware	100
PPG Advanced Surface Technologies, LLC	Delaware	65
PPG Architectural Finishes, Inc.	Delaware	100
PPG Holdings Argentina USA LLC	Delaware	100
PPG Holdings Latin America USA LLC	Delaware	100
PPG Industries International, Inc.	Delaware	100
PPG Industries Ohio, Inc.	Delaware	100
PPG Industries Securities, LLC	Delaware	100
PPG Kansai Automotive Finishes U.S., LLC	Delaware	60
PRC-Desoto International, Inc.	California	100
Road Infrastructure Investment Holdings, Inc.	Delaware	100
SEM Products, Inc.	North Carolina	100
Sierracin Corporation	Delaware	100
Sierracin/Sylmar Corporation	California	100
Texstars, LLC	Delaware	100
The Crown Group Co.	Michigan	100
Traffic Safety Parent LLC	Delaware	100
Whitford Corporation	Pennsylvania	100
Whitford Worldwide Company, LLC	Delaware	100
Other Americas:		
Comercial Mexicana de Pinturas, S.A. de C.V.	Mexico	100
Comex Industrial Coatings, S.A. de C.V.	Mexico	100
Consorcio Comex, S.A. de C.V.	Mexico	100
Cristacol S.A.	Argentina	100
Distribuidora Kroma, S.A. de C.V.	Mexico	100
Empresa Aga, S.A. de C.V.	Mexico	100
Ennis Paint Canada ULC	Alberta	100
Fpu Industrial, S.A. de C.V.	Mexico	100
Grupo Comex, S.A. de C.V.	Mexico	100
Metokote Canada ULC	Canada	100

	Metokote de Mexico S. de R.L. de C.V.	Mexico	100
	Plásticos Envolventes, S.A. de C.V.	Mexico	100
	PPG ALESCO Automotive Finishes Mexico, S. de R.L. de C.V.	Mexico	60
	PPG A P Resinas, S.A. de C.V.	Mexico	100
	PPG Architectural Coatings (Puerto Rico) Inc.	Puerto Rico	100
	PPG Architectural Coatings Canada Inc./ PPG Revêtements Architecturaux Canada Inc.	Canada	100
	PPG Business Services, S.A. de C.V.	Mexico	100
	PPG Canada Inc.	Canada	100
	PPG Industrial do Brasil - Tintas E. Vernizes - Ltda.	Brazil	100
	PPG Industries Colombia Ltda.	Colombia	100
	PPG Industries de Mexico, S.A. de C.V.	Mexico	100
	PPG Kansai Automotive Finishes Canada, LP	Canada	60
	Viasa, S.A. de C.V.	Mexico	100
EMEA:			
	AS Tikkurila	Estonia	100
	Chorlton Trade Paints Limited	United Kingdom	100
	Ennis Paint U.K. Holding Company Limited	England and Wales	100
	EPIC Insurance Co. Ltd.	Bermuda	100
	Industria Chimica Reggiana I.C.R. SPA	Italy	100
	Johnstone’s Paints Limited	United Kingdom	100
	Kalon Investment Company Limited	United Kingdom	100
	Kalon South Africa Proprietary Limited	South Africa	100
	Metokote UK Limited	United Kingdom	100
	OOO Tikkurila	Russia	100
	Peintures de Paris SAS	France	99.95
	PPG (Austria) Handels GmbH	Austria	100
	PPG AC - France SA	France	99.95
	PPG Architectural Coatings Ireland Limited	Ireland	100
	PPG Architectural Coatings Italy S.r.l	Italy	100
	PPG Architectural Coatings UK Limited	United Kingdom	100
	PPG Cetelon Lackfabrik GmbH	Germany	100
	PPG Cieszyn S.A.	Poland	100
	PPG Coatings B.V.	The Netherlands	100
	PPG Coatings Belgium B.V.	Belgium	100
	PPG Coatings Danmark A/S	Denmark	100
	PPG Coatings Deutschland GmbH	Germany	100
	PPG Coatings Europe B.V.	The Netherlands	100
	PPG Coatings Nederland B.V.	The Netherlands	100
	PPG Coatings S.A.	France	99.9
	PPG Coatings South Africa (Pty) Ltd.	South Africa	100
	PPG Deco Czech a.s.	Czech Republic	100
	PPG Deco Polska sp. z.o.o.	Poland	100
	PPG Deco Slovakia, s.r.o.	Slovakia	100
	PPG Deutschland Business Support GmbH	Germany	100
	PPG Deutschland Sales & Services GmbH	Germany	100
	PPG Distribution S.A.S.	France	99.95
	PPG DYRUP, S.A.	Portugal	100
	PPG Europe B.V.	The Netherlands	100

PPG Finance B.V.	The Netherlands	100
PPG Finland Oy	Finland	100
PPG France Business Support S.A.S.	France	100
PPG France Manufacturing S.A.S.	France	100
PPG Guadeloupe S.A.S.	Guadeloupe	100
PPG Hemmelrath Lackfabrik GmbH	Germany	100
PPG Holdco S.A.S.	France	100
PPG Holdings (U.K.) Limited	United Kingdom	100
PPG Ibérica Sales & Services, S.L.	Spain	100
PPG Ibérica, S.A.	Spain	100
PPG Industrial Coatings B.V.	The Netherlands	100
PPG Industries (UK) Ltd	United Kingdom	100
PPG Industries Czech Republic, s.r.o.	Czechia	100
PPG Industries Delfzijl B.V.	The Netherlands	100
PPG Industries Europe Sàrl	Switzerland	100
PPG Industries France S.A.S.	France	100
PPG Industries Italia S.r.l.	Italy	100
PPG Industries Kimya a Sanayi VE Ticaret AS	Turkey	100
PPG Industries Lackfabrik GmbH	Germany	100
PPG Industries Middle East FZE	U.A.E.	100
PPG Industries Netherlands B.V.	The Netherlands	100
PPG Industries Poland Sp. Z.o.o.	Poland	100
PPG Italia Business Support S.r.l.	Italy	100
PPG Italia Sales & Services S.r.l.	Italy	100
PPG Kansai Automotive Finishes U.K. LLP	United Kingdom	60
PPG Luxembourg Finance S.àR.L.	Luxembourg	100
PPG Luxembourg Holdings S.àR.L.	Luxembourg	100
PPG Refinish Distribution Limited	United Kingdom	100
PPG Réunion S.A.S.	La Reunion	51
PPG Romania S.A.	Romania	100
PPG SCM Ireland Ltd.	Ireland	100
PPG Switzerland GmbH	Switzerland	100
PPG Trilak Korlátolt Felelősségü Tárasaság (PPG Trilak Kft.)	Hungary	100
PPG Wörwag Coatings GmbH & Co. KG	Germany	100
PPG Wörwag International GmbH	Germany	100
ProCoatings B.V.	The Netherlands	100
Revocoat France S.A.S.	France	100
Revocoat Iberica SLU	Spain	100
Sealants Europe S.A.S.	France	100
Sigma Marine & Protective Coatings Holding B.V.	The Netherlands	100
SigmaKalon (BC) UK Limited	United Kingdom	100
Tikkurila Norge A/S	Norway	100
Tikkurila Oyj	Finland	100
Tikkurila Sverige AB	Sweden	100
TOO Tikkurila	Kazakhstan	100
Whitford B.V.	The Netherlands	100
Whitford Ltd. (UK)	United Kingdom	100
Whitford S.r.l.	Italy	100

Asia:			
	Broad Range Development Limited	Hong Kong	100
	Chengdu Huajia Surface Technology Co., Ltd.	China	100
	Dongguan Huajia Surface Technology Co., Ltd.	China	100
	Foshan Bairun Chemicals Co., Ltd.	China	100
	Hemmelrath Automotive Coatings (Jilin) Co., Ltd.	China	100
	Hemmelrath International Trade (Shanghai) Co., Ltd.	China	100
	Huangshan Huajia Surface Technology Co., Ltd.	China	100
	Jinan Huajia Surface Technology Co., Ltd.	China	100
	PPG Aerospace Materials (Suzhou) Co. Ltd.	China	100
	PPG Asian Paints Private Ltd.	India	50
	PPG Coatings (Hong Kong) Co., Limited	Hong Kong	100
	PPG Coatings (Kunshan) Co., Ltd.	China	100
	PPG Coatings (Malaysia) Sdn. Bhd.	Malaysia	100
	PPG Coatings (Shanghai) Co., Ltd.	China	100
	PPG Coatings (Thailand) Co., Ltd.	Thailand	100
	PPG Coatings (Tianjin) Co., Ltd.	China	100
	PPG Coatings (Wuhu) Company, Ltd.	China	100
	PPG Coatings (Zhangjiagang) Co., Ltd.	China	100
	PPG Coatings Singapore Pte. Ltd.	Singapore	100
	PPG Industries (Korea) Ltd.	Korea, Republic Of	100
	PPG Industries (Singapore) Pte., Ltd.	Singapore	100
	PPG Industries Australia PTY Limited A.C.N. 055 500 939	Australia	100
	PPG Industries New Zealand Limited	New Zealand	100
	PPG Investment (Singapore) Pte. Ltd.	Singapore	100
	PPG Japan Ltd.	Japan	100
	PPG Management (Shanghai) Co., Ltd.	China	100
	PPG Packaging Coatings (Suzhou) Co., Ltd.	China	100
	PPG Paints Trading (Shanghai) Co., Ltd.	China	100
	PPG Performance Coatings (Hong Kong) Limited	Hong Kong	100
	PPG Powder Coatings (Shanghai) Co., Ltd.	China	100
	PPG SSC Co., Ltd.	South Korea	80.01
	PPG Vietnam Co., Ltd.	Vietnam	100
	Protec Pty Ltd.	Australia	100
	PT. PPG Coatings Indonesia	Indonesia	100
	Revocoat (Wuhan) Co., Ltd.	China	100
	Sikar (Shanghai) Trading Co. Ltd.	China	100
	Tikkurila (China) Paints Co., Ltd.	China	100
	Whitford Jiangmen Ltd.	China	100
	Whitford Ltd. (HK)	Hong Kong	100
	Whitford Pte. Ltd.	Singapore	100
	Worwag Coatings (Langfang) Co. Ltd.	China	100

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-270106) and Registration Statements on Form S-8 (Nos. 333-258227, 333-258226, 333-258225, 333-173656, 333-173657, 333-173658, 333-176852, 333-192988, 333-212813, and 333-217448) of PPG Industries, Inc. of our report dated February 15, 2024 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 15, 2024

Exhibit 24

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Stephen F. Angel, a Director of PPG Industries, Inc. (the "Corporation"), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation's Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ STEPHEN F. ANGEL

Stephen F. Angel

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Melanie L. Healey, a Director of PPG Industries, Inc. (the "Corporation"), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation's Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ MELANIE L. HEALEY

Melanie L. Healey

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Gary R. Heminger, a Director of PPG Industries, Inc. (the “Corporation”), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation’s Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ GARY R. HEMINGER

Gary R. Heminger

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Michael W. Lamach, a Director of PPG Industries, Inc. (the "Corporation"), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation's Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ MICHAEL W. LAMACH

Michael W. Lamach

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Kathleen A. Ligocki, a Director of PPG Industries, Inc. (the "Corporation"), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation's Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ KATHLEEN A. LIGOCKI

Kathleen A. Ligocki

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Michael T. Nally, a Director of PPG Industries, Inc. (the "Corporation"), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation's Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ MICHAEL T. NALLY

Michael T. Nally

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Guillermo Novo, a Director of PPG Industries, Inc. (the “Corporation”), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation’s Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ GUILLERMO NOVO

Guillermo Novo

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Martin H. Richenhagen, a Director of PPG Industries, Inc. (the "Corporation"), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation's Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ MARTIN H. RICHENHAGEN

Martin H. Richenhagen

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Christopher N. Roberts III , a Director of PPG Industries, Inc. (the “Corporation”), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation’s Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ CHRISTOPHER N. ROBERTS III

Christopher N. Roberts III

PPG INDUSTRIES, INC.

POWER OF ATTORNEY

(10-K)

I, Catherine R. Smith, a Director of PPG Industries, Inc. (the “Corporation”), a Pennsylvania corporation, hereby constitute and appoint Timothy M. Knavish, Anne M. Foulkes and Vincent J. Morales, or any of them, my true and lawful attorneys or attorneys-in-fact, with full power of substitution and revocation, to sign, in my name and on my behalf as a Director of the Corporation, the Corporation’s Form 10-K for the fiscal year ended December 31, 2023, to be filed with the Securities and Exchange Commission, Washington, DC.

WITNESS my hand this 15th day of February, 2024.

/s/ CATHERINE R. SMITH

Catherine R. Smith

Exhibit 31.1

PRINCIPAL EXECUTIVE OFFICER CERTIFICATION

I, Timothy M. Knavish, certify that:

1. I have reviewed this annual report on Form 10-K of PPG Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2024

/s/ Timothy M. Knavish

Timothy M. Knavish
Chairman and Chief Executive Officer

Exhibit 31.2

PRINCIPAL FINANCIAL OFFICER CERTIFICATION

I, Vincent J. Morales, certify that:

1. I have reviewed this annual report on Form 10-K of PPG Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2024

/s/ Vincent J. Morales

Vincent J. Morales
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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 on Form 10-K of PPG Industries, Inc. for the period ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Timothy M. Knavish, Chairman and Chief Executive Officer of PPG Industries, Inc., certify to the best of my knowledge, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(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 presents, in all material respects, the financial condition and results of operations of PPG Industries, Inc.

/s/ Timothy M. Knavish

Timothy M. Knavish
Chairman and Chief Executive Officer
February 15, 2024

A signed original of this written statement required by Section 906 has been provided to PPG Industries, Inc. and will be retained by PPG Industries, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

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 on Form 10-K of PPG Industries, Inc. for the period ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Vincent J. Morales, Senior Vice President and Chief Financial Officer of PPG Industries, Inc., certify to the best of my knowledge, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(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 presents, in all material respects, the financial condition and results of operations of PPG Industries, Inc.

/s/ Vincent J. Morales

Vincent J. Morales
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)
February 15, 2024

A signed original of this written statement required by Section 906 has been provided to PPG Industries, Inc. and will be retained by PPG Industries, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

PPG Industries, Inc.
Compensation Recovery Policy

Adopted by the Board of Directors on July 20, 2023

Effective Date

This Compensation Recovery Policy (this "Policy") shall apply to any Incentive Compensation received on or after July 20, 2023.

Statement of Policy

Subject to the exceptions set forth below, following an Accounting Restatement, PPG Industries, Inc. (the "Company") shall recover reasonably promptly the amount of Incentive Compensation received during the Recoupment Period by any Covered Executive that exceeds the Incentive Compensation that would have been received by such Covered Executive taking into account the Accounting Restatement (calculated on a pre-tax basis).

This Policy, as may be amended from time to time by the Board, will apply to all Incentive Compensation received during the Recoupment Period by a person (a) after beginning service as a Covered Executive, (b) who served as a Covered Executive at any time during the performance period for that Incentive Compensation and (c) while the Company has a class of securities listed on the New York Stock Exchange ("NYSE") or another national securities exchange or a national securities association. Accordingly, this Policy can apply to a person that is no longer a Company employee or a Covered Executive at the time of recovery.

Incentive Compensation is deemed "received" for purposes of this Policy in the fiscal period during which the measure specified in the Incentive Compensation award is attained, even if the payment or issuance of such Incentive Compensation occurs after the end of that period. For example, if the performance target for an award is based on total stockholder return for the year ended December 31, 2023, the award will be deemed to have been received in 2023 even if paid in 2024.

Exceptions

The Company shall not be required to recover Incentive Compensation pursuant to this Policy if the Human Capital Management and Compensation Committee (the "Committee") has made a determination that recovery would be impracticable and one of the following conditions are met:

(a) after making a reasonable and documented attempt to recover erroneously awarded Incentive Compensation, the Committee determines that the direct expenses that would be paid to a third party to assist in enforcing the Policy would exceed the amount to be recovered; or

(b) based on a legal opinion of counsel acceptable to the NYSE, the Committee determines that recovery would violate a home country law adopted prior to November 28, 2022; or

(c) the Committee determines that recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and regulations thereunder.

Definitions

"*Accounting Restatement*" means the Company is required to prepare an accounting restatement due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period. For the avoidance of doubt, a restatement resulting solely from the retrospective application of a change in generally accepted accounting principles is not an Accounting Restatement.

"*Covered Executive*" shall mean the Company's Chief Executive Officer, President, Chief Financial Officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice-president of the Company in charge of a principal business unit, division, or function, any other officer who performs a policy-making function for the Company, any other person who performs similar policy-making functions for the Company, and any other employee who may from time to time be deemed subject to this Policy by the Committee.

"*Incentive Compensation*" means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a financial reporting measure. For purposes of this definition, a "*financial reporting measure*" is (i) a measure that is determined and presented in accordance with the accounting principles used in preparing the Company's financial statements or derived wholly or in part from such measures, or (ii) the Company's stock price or total shareholder return.

"*Recoupment Period*" means the three completed fiscal years preceding the Trigger Date.

"*Trigger Date*" means the earlier to occur of: (a) the date the Board of Directors, the Audit Committee, or the officer or officers of the Company authorized to take such action concludes, or reasonably should have concluded, that the Company is required to prepare an Accounting Restatement; or (b) the date a court, regulator, or other legally authorized body directs the Company to prepare an Accounting Restatement.

Administration

This Policy is intended to comply with the listing requirements of the NYSE and related SEC rules and shall be interpreted in a manner consistent with those requirements. The Committee has full authority to interpret and administer this policy. The Committee's determinations under the policy shall be final and binding on all persons and shall be given the maximum deference permitted by law. If the Committee cannot determine the amount of excess Incentive Compensation received by a Covered Executive directly from the information in the Accounting Restatement, such as in the case of Incentive Compensation tied to stock price or total stockholder return, then it shall make its determination based on a reasonable estimate of the effect of the Accounting Restatement and shall maintain documentation of such determination.

No Indemnification or Advancement of Legal Fees

The Company shall not indemnify any Covered Executives against, or pay the premiums for any insurance policy to cover, any amounts recovered under this Policy or any expenses that a Covered Executive incurs in opposing Company efforts to recoup amounts pursuant to the Policy.

Non-Exclusive Remedy

Recoupment of Incentive Compensation pursuant to this Policy shall not in any way limit or affect the rights of the Company to pursue disciplinary, legal, or other action or pursue any other remedies available to it. This Policy shall be in addition to, any rights of the Company to recoup Incentive Compensation from Covered Executives under applicable laws and regulations, including but not limited to the Sarbanes-Oxley Act of 2002, as amended, or pursuant to the terms of any employment agreement, equity award agreement, or similar agreement with a Covered Executive.