Risk Factors Comparison 2024-02-22 to 2023-02-23 Form: 10-K

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In addition to the other information in this Form 10- K, the following factors should be considered in evaluating Olin and our business. All of our forward- looking statements should be considered in light of these factors **. The following summarizes the risks and uncertainties that we consider to be material and that may adversely affect our business, financial condition, results of operations, cash flows and / or reputation** . Additional risks and uncertainties that we are unaware of or that we currently deem immaterial also may become important factors that affect us. Business, Industry and Operational Risks Sensitivity to Global Economic Conditions — Our operating results could be negatively affected during economic and industry downturns. Our industries and the businesses of most of our customers have historically experienced periodic downturns. These economic, seasonal and industry downturns have been characterized by diminished product demand, excess manufacturing capacity and, in some cases, lower average selling prices. Therefore, any significant downturn in our customers' businesses, industry conditions, or in global economic conditions could result in a reduction in demand for our products ~~and could adversely affect our results of operations or financial condition~~ . Although a majority of our sales are within North America, a large part of our financial performance is dependent upon a healthy economy beyond North America because we have a significant amount of sales abroad and our customers sell their products abroad. As a result, our business is and will continue to be affected by general economic conditions and other factors in Europe, Asia Pacific, particularly China, and Latin America, including fluctuations in interest rates, customer demand, labor and energy costs, currency changes and other factors beyond our control, such as public health epidemics. The demand for our products and our customers' products is directly affected by such fluctuations. In addition, our customers could decide to move some or all of their production to locations that are more remote from our facilities, and this could reduce demand for our products. We cannot assure you that events having an adverse effect on the industries in which we operate will not occur or continue, such as a downturn in the European, Asian Pacific, particularly Chinese, Latin American, or other world economies, increases in interest rates, unfavorable currency fluctuations or prolonged effects of global public health crises, **including** ~~particularly the 2019 Novel Coronavirus (COVID- 19) pandemic~~ **pandemics** . Economic conditions in other regions of the world, predominantly Asia and Europe, can adversely ~~impact~~ **affect** the balance between global supply and demand for our chemical products and increase the amount of products produced and made available for export to North America and other jurisdictions **in** which we sell ~~into~~ . Any significant increased product supply could put downward pressure on our product pricing, negatively ~~impacting~~ **affecting** our profitability. Pricing Pressure — Our profitability could be reduced by declines in average selling prices of our products. Our industries and each of our business segments experience fluctuating supply and demand, particularly in our Chlor Alkali Products and Vinyls segment, which can result in changes in selling prices. Periods of high demand, tight supply and increasing operating margins tend to result in increases in capacity and production until supply exceeds demand, generally followed by periods of oversupply and declining prices. We believe our strategic operating model ~~will~~ **can** mitigate pricing pressure historically experienced during periods of supply exceeding demand. Nevertheless, we cannot assure you that increased pricing pressure will not ~~impact~~ **affect** our operating results in the future during these periods. Another factor influencing demand and pricing for chemical products is the price of energy. Higher natural gas prices increase our customers' and competitors' manufacturing costs ~~,~~ and depending on the ratio of crude oil to natural gas prices, could make our customers less competitive in world markets **,** negatively ~~impacting~~ **affecting** the demand and pricing for our chemical products. In the chemical industries in which we operate, price is one of the major supplier selection ~~criterion~~ **criteria** . Pricing is subject to a variety of factors, some of which are outside of our control. Decreases in the average selling prices of our products could have a material adverse effect on our profitability. While we strive to maintain or increase our profitability by executing our strategic operating model and by reducing costs through improving production efficiency, emphasizing higher margin products and by controlling transportation, selling and ~~administration~~ **administrative** expenses, we cannot assure you that these efforts will be sufficient to fully offset the effect of possible decreases in pricing on operating results. Chlorine and caustic soda are produced simultaneously and in a fixed ratio of 1. 0 ton of chlorine to 1. 1 tons of caustic soda. An imbalance in customer demand may require Olin to reduce production of both chlorine and caustic soda or take other steps to correct the imbalance. Since we cannot store large quantities of chlorine, we may not be able to respond to an imbalance in customer demand for these products quickly or efficiently. To mitigate exposure and maximize value from the entire ECU, we continually take a number of actions, including, managing our production rates to the prevailing weaker side of the ECU, leveraging our portfolio of chlorine and chlorine derivatives outlets and entering into purchase for re-sale transactions. If our efforts are not successful and a substantial imbalance occurred, we might need to take actions that could have a material adverse ~~impact~~ **effect** on our business ~~, results of operations and financial condition~~ . Our Epoxy segment is also subject to changes in operating results as a result of pricing pressures. Selling prices of epoxy materials are affected by changes in raw material costs, including energy, propylene and benzene, customer demand, and global fluctuations in supply and demand. Periods of supply / demand imbalances, particularly changes in trade flows within Asia Pacific markets, particularly China, can result in increased pricing pressure on our epoxy products. Declines in average selling prices of products of our Epoxy segment could **have a material** ~~adversely~~ -- **adverse** ~~affect~~ **effect on** our business ~~, financial condition, and results of operations~~ . Our Winchester segment is also subject to pricing pressures. Selling prices of ammunition are affected by changes in raw material costs and availability, customer demand and industry production capacity. Declines in average selling prices of products of our Winchester segment could **have a material** ~~adversely~~ -- **adverse** ~~affect~~ **effect on** our business ~~, financial condition, and results of operations~~ . We cannot assure you that pricing or profitability in the future will be comparable to any particular historical period, including the most recent period shown in our operating results. We cannot assure you that the chemical industry or ammunition industry will not experience adverse trends in the future ~~, or that our business, financial condition, and results of operations will not be adversely affected by them~~ . Strategic Operating Model — Our operating results could be negatively ~~impacted~~ **affected** if we do not successfully execute our operating model in our chemicals businesses. Our strategic operating model in our chemicals businesses prioritizes ECU margins over sales volume. Adopted in late 2020, this model represents a change to how our Chlor Alkali Products and Vinyls and Epoxy businesses traditionally operated over the years. To mitigate exposure and maximize value from the entire ECU, the model necessitates managing production rates to the weaker side of the ECU. The execution of the model may not be successful over time. For example, we may not be able to consistently achieve higher margins **,** or the margin improvement achieved might be more than offset by the impact from lower sales volumes, either of which could have a material adverse effect on our **business** ~~operating results and cash flows~~ . In addition, we take actions from time to time designed to complement our operating model, such as purchase for re- sale transactions (which we sometimes refer to as " parlaying activities ") that may not improve our operating results and could adversely ~~impact~~ **affect** our business if these activities are not successfully implemented. Some of our assets were designed to operate at consistently high operating rates. If we operate at lower operating rates for extended periods or make frequent changes to operating rates, our assets may become less reliable or may require additional maintenance or capital investment, which could have a material adverse ~~impact~~ **effect** on our **business** ~~operating results and cash flows~~ . Additionally, we may not be able to attract, develop, or retain the skills necessary to effectively execute the strategic operating model. Our model is dependent on implementing changes to the way we transact business with customers and other third parties. Customers or third parties may not be willing to transact with us on terms acceptable to us or at all. If we fail to effectively execute our strategic operating model, our operating results may fail to ~~meet expectations~~ **achieve the level of profitability that we forecast,** and our business ~~, financial condition, and results of operations~~ could be adversely **affected. Ability to Manage Executive Officer Transition — We must attract, retain and motivate key executive officers and the failure to do so or to effectively manage the transition of executive officers could have a material adverse effect on our business. On February 19, 2024, we announced that our Board of Directors appointed Kenneth Lane, as President and Chief Executive Officer of Olin, effective as of March 18, 2024. Mr. Lane will succeed Scott Sutton, who will be stepping down as President and Chief Executive Officer and Director of Olin on March 18, 2024. Our success depends in large part on our ability to recruit and retain a qualified successor to Mr. Sutton and the continued availability and service of our other executive officers and senior management. The market for executive officers and senior management in our industry is competitive and we may not be able to retain our executive officers and senior management. We must continue to recruit, retain, and motivate management and other team members sufficiently, both to maintain our current business and to execute our long- term strategic initiatives. The loss of any of our executive officers or other key senior management without sufficient advance notice could prevent or delay the implementation and completion of our strategic initiatives, divert management' s attention to seeking qualified replacements, be disruptive to our daily operations or** ~~impacted~~ -- **impact public or market perception. Any failure by us to manage a successful leadership transition of an executive officer and to timely identify a qualified permanent replacement could have a material adverse effect on our business** . Cost Control — Our profitability could be reduced if we experience increasing raw material, utility, transportation or logistics costs, or if we fail to achieve targeted cost reductions. Our operating results and profitability are dependent upon our continued ability to control, and in some cases reduce, our costs. If we are unable to do so, or if costs outside of our control, particularly our costs of raw materials, utilities, transportation and similar costs, increase beyond anticipated levels, our profitability will decline. In addition, an increase in costs generally as a result of rising inflation, or in a particular sector such as the energy or transportation sector, could result in rising costs which we cannot fully mitigate through product price increases or cost reductions, which could also adversely affect our profitability. For example, if our feedstock and energy costs increase, and we are unable to pass the increased costs on to customers, our profitability in our Chlor Alkali Products and Vinyls and Epoxy segments would be negatively affected. Similarly, costs of commodity metals and other materials used in our Winchester business, such as copper **, propellant** and lead, can vary. If we experience significant increases in these costs and are unable to raise our prices to offset the higher costs, the profitability in our Winchester business would be negatively affected. Suppliers — We rely on a limited number of third- party suppliers for specified feedstocks and services. We obtain a significant portion of our raw materials from a few key suppliers. If any of these suppliers fail to meet their obligations under present or any future supply agreements, we may be forced to pay higher prices or incur higher costs to obtain the necessary raw materials. Any interruption of supply or any price increase of raw materials could have a material adverse effect on our business ~~, financial condition and results of operations~~ . Certain of our facilities are dependent on feedstocks, services, and related infrastructure provided by third parties, which are provided pursuant to long- term contracts. Any failure of those third parties to perform their obligations under those agreements or disagreements regarding the performance under those agreements or inability to renew such agreements at acceptable terms could adversely affect the operation of the affected facilities and our business, ~~financial condition and results of operations,~~ or result in diversion of management' s attention or our resources from other business matters. If we are required to obtain an alternate source for these feedstocks or services, we may not be able to obtain equally favorable pricing and terms. Additionally, we may be forced to pay additional transportation costs or to invest in capital projects for pipelines or alternate facilities to accommodate railcar or other delivery methods or to replace other services. ~~A~~ **Subject to existing contracts, a** vendor may choose ~~, subject to existing contracts,~~ to modify its relationship with us due to general economic concerns or concerns relating to the vendor or us, at any time. Any significant change in the terms that we have with our key suppliers could **have a** ~~materially~~ -- **material** ~~and adversely~~ -- **adverse** ~~affect~~ **effect on** our business ~~, financial condition and results of operations~~ , as could significant additional requirements from suppliers that we provide them additional security in the form of prepayments or posting letters of credit. Production Hazards — Our facilities are subject to operating hazards, which may disrupt our business. We are dependent upon the continued safe and reliable operation of our production facilities. Our production facilities are subject to hazards associated with the manufacture, handling, storage and transportation of chemical materials and products and ammunition, including leaks and ruptures, explosions, fires, inclement weather and natural disasters, unexpected utility disruptions or outages, unscheduled downtime, equipment failure, information technology systems interruptions or failures, terrorism, transportation interruptions, transportation incidents involving our chemical products, chemical spills and other discharges or releases of toxic or hazardous substances or gases and environmental hazards. Due to the integrated nature of our large chemical sites, an event at one plant could ~~impact~~ **affect** production across multiple plants at a facility. **In** ~~From time to time in~~ the past, we have had incidents that have temporarily shut down or otherwise disrupted our manufacturing, causing production delays and resulting in liability for workplace injuries and fatalities. Some of our operations involve ~~the manufacture~~ **manufacturing** and / or handling **various** ~~of a variety of~~ explosive and flammable materials. Use of our products by our customers could also result in liability if an explosion, fire, spill or other accident were to occur. We cannot assure you that we will not experience these types of incidents in the future or that these incidents will not result in production delays or otherwise have a material adverse effect on our business **. We maintain risk management strategies** , ~~financial condition~~ **including but not limited to levels of insurance associated with property, casualty and business interruption. Such insurance may not cover all of the risks associated with the hazards of** ~~or~~ **our** ~~results~~ **business and is subject to limitations, including deductibles and maximum liabilities covered. We may incur losses beyond the limits, or outside the coverage,** of ~~operations~~ **our insurance policies. We may also be unable to continue to maintain our existing insurance or obtain comparable insurance at a reasonable cost. Physical Risk of Climate- Related Events — Our facilities are subject to physical risks associated with climate- related events or increased severity and frequency of severe weather events. We are exposed to climate- related risks and uncertainties, many of which are outside of our control** . We have a substantial presence near the U. S. Gulf Coast and a significant portion of our manufacturing facilities, similar to our competitors and customers, are structured near major bodies of water. Major hurricanes, or other weather- related events, have caused significant disruption in our operations on the U. S. Gulf Coast, logistics across the region and the supply of certain raw materials, which have had an adverse ~~impact~~ **effect** on volume and cost for some of our products ~~. Additionally, we are are exposed to increasing climate- related risks and uncertainties, many of which are outside of our control~~ . Climate change could result in more frequent severe weather events, potential changes in precipitation patterns and extreme variability in weather patterns, which could disrupt our operations as well as those of our customers and suppliers. Severe weather conditions or other natural phenomena in the future, including those resulting from climate change, could ~~negatively~~ **have a material adverse** ~~affect~~ **effect on** our ~~results of operations. We maintain risk management strategies, including but not limited to levels of insurance associated with property, casualty and~~ business ~~interruption. Such insurance may not cover all of the risks associated with the hazards of our business and is subject to limitations, including deductibles and maximum liabilities covered. We may incur losses beyond the limits, or outside the coverage, of our insurance policies. We may also be unable to continue to maintain our existing insurance or obtain comparable insurance at a reasonable cost~~ . Third- Party Transportation — We rely heavily on third- party transportation, which subjects us to risks and costs that we cannot control ~~, and which risks and costs may have a material adverse effect on our financial position or results of operations~~ . We rely heavily on railroad, truck, marine vessel, barge and other shipping companies to transport finished products to customers and to transport raw materials to the manufacturing facilities used by each of our businesses. These transport operations are subject to various hazards and risks, including extreme weather conditions, work stoppages and operating hazards, as well as domestic and international transportation and maritime regulations. In addition, the methods of transportation we utilize, including shipping chlorine and other chemicals by railroad and by barge, may be subject to additional, more stringent and more costly regulations in the future. If we are delayed or unable to ship finished products or unable to obtain raw materials as a result of any such new or modified regulations or public policy changes related to transportation safety, or these transportation companies' failure to operate properly, or if there are significant changes in the cost of these services due to new additional regulations, or otherwise, we may not be able to arrange efficient alternatives and timely means to obtain raw materials or ship goods, which could result in a material adverse effect on our business ~~, financial position or results of operations~~ . If any third- party railroad that we utilize to transport chlorine and other chemicals ceases to transport certain hazardous materials, or if there are significant changes in the cost of shipping hazardous materials by rail or otherwise, we may not be able to arrange efficient alternatives and timely means to deliver our products or at all, which could result in a material adverse effect on our business ~~, financial position or results of operations~~ . Raw Materials — Availability of purchased feedstocks and energy, and the volatility of these costs, ~~impact~~ **affect** our operating costs and add variability to earnings. Purchased feedstock, including propylene and benzene, and energy costs account for a substantial portion of our total production costs and operating expenses. We purchase certain raw materials as feedstocks. Feedstock and energy costs generally follow price trends in crude oil and natural gas, which are sometimes volatile. Ultimately, the ability to pass on underlying cost increases in a timely manner or at all is partially dependent on market conditions. Conversely, when feedstock and energy costs decline, selling prices generally decline as well. As a result, volatility in these costs could ~~impact~~ **have a material adverse effect on** our business ~~, financial condition and results of operations~~ . If the availability of any of our principal feedstocks is limited or we are unable to obtain natural gas or energy from any of our energy sources, we may be unable to produce some of our products in the quantities demanded by our customers, which could have a material adverse effect on plant utilization and our sales of products requiring such raw materials. We have long- term supply contracts with various third parties for certain raw materials, including ethylene, electricity, propylene and benzene. As these contracts expire, we may be unable to renew these contracts or obtain new long- term supply agreements on terms comparable or as favorable to us, depending on market conditions, which may have a material adverse effect on our business ~~, financial condition and results of operations~~ . In addition, many of our long- term contracts contain provisions that allow our suppliers to limit the amount of raw materials shipped to us below the contracted amount in force majeure or similar circumstances. If we are required to obtain alternate sources for raw materials because our suppliers are unwilling or unable to perform under raw material supply agreements or if a supplier terminates or is unwilling to renew its agreements with us, we may not be able to obtain these raw materials from alternative suppliers or obtain new long- term supply agreements on terms comparable or as favorable to us. Information Security — A failure of our information technology systems, or an interruption in their operation due to internal or external factors **,** including cyber- attacks, could have a material adverse effect on our business ~~, financial condition or results of operations~~ . Our operations ~~are dependent~~ --- **depend** on our ability to protect our information systems, computer equipment and information databases from systems failures. We rely on both internal information technology systems and certain external ~~services and~~ service providers to **assist in the** ~~manage~~ **management of** the day- to- day operation of our business, operate elements of our manufacturing facilities, manage relationships with our employees, customers and suppliers, fulfill customer orders and maintain our financial ~~and~~ **,** accounting **or other business** records. Failure of any one or more than one of our information technology systems could be caused by internal or external events **or parties** , such as incursions by intruders or hackers, computer viruses, cyber- attacks, failures in hardware or software, or power or telecommunication fluctuations or failures. The failure of our information technology systems to perform as anticipated for any reason or any significant breach of security could disrupt our business and result in numerous adverse consequences, including reduced effectiveness and efficiency of operations, increased costs or loss of important information, or loss of sales, any of which could have a material adverse effect on our business ~~, financial condition or results of operations~~ . We have technology and information security processes, periodic external service and service provider reviews, insurance policies and disaster recovery plans in place to mitigate our risk to these vulnerabilities. However, these measures may not be adequate to ensure that our operations will not be disrupted or our financial impact minimized, should such an event occur. Ability to Attract and Retain Qualified Employees — We must attract, retain and motivate key employees, and the failure to do so may **materially** adversely affect our business ~~, financial condition or results of operations~~ . We believe our success depends on hiring, retaining and motivating key employees, including executive officers. Our future success depends in part on our ability to identify and develop talent throughout the organization who adopt and successfully execute our strategic operating model. The development and retention of key personnel and appropriate senior management succession planning will continue to be important to the successful execution of our strategies. We may have difficulty locating and hiring qualified personnel. In addition, we may have difficulty retaining such personnel once hired, and key people may leave and compete against us. The loss of key personnel or our failure to attract and retain other qualified and experienced personnel could disrupt or materially adversely affect our business ~~, financial condition or results of operations~~ . In addition, our operating results could be adversely affected by increased costs due to increased competition for employees or higher employee turnover, which may result in the loss of significant customer business or increased costs. Acquisitions and Joint Ventures — We may not be able to complete future acquisitions or joint venture transactions or successfully integrate them into our business, which could **materially** adversely affect our business ~~or results of operations~~ . As part of our growth strategy, we intend to pursue acquisitions and joint venture opportunities consistent with or complementary to our existing business strategies. Successful accomplishment of this objective may be limited by the availability and suitability of acquisition candidates, the ability to obtain regulatory approvals necessary to complete a planned transaction, and by our financial resources. Acquisitions and joint venture transactions involve numerous risks, including difficulty determining appropriate valuation, integrating operations, technologies, services and products of the acquired businesses, personnel turnover and the diversion of management' s attention from other business matters. The nature of a joint venture requires us to work cooperatively with unaffiliated third parties. Differences in views among joint venture participants may result in delayed decisions or failure to agree on major decisions. If these differences cause the joint ventures to deviate from their business plans or fail to achieve their desired operating performance, our results of operations could be adversely affected. In addition, we may be unable to achieve anticipated benefits from these transactions in the time frame that we anticipate, or at all, which could **have a materially** ~~adversely~~ -- **adverse** ~~impact~~ **effect on** our business ~~, financial condition and results of operations~~ . International Sales and Operations — We are subject to risks associated with our international sales and operations that could have a material adverse effect on our business ~~or results of operations~~ . Olin has an international presence, including the geographic regions of Europe, Asia Pacific, Latin America and Canada. In ~~2022~~ **2023** , approximately ~~39~~ **33** % of our sales were generated outside of the United States. These international sales and operations expose us to risks, including: • difficulties and costs associated with complying with complex and varied laws, treaties, and regulations; • tariffs and trade barriers; • outbreaks of serious disease, such as **pandemics** ~~COVID- 19~~ , which could cause us and our suppliers and / or customers to temporarily suspend operations in affected areas, restrict the ability of Olin to distribute our products or cause economic downturns that could affect demand for our products **; • geopolitical or regional conflicts which can disrupt trade flows, supply / demand fundamentals, or the ability to sell certain products within countries or regions** ; • changes in laws and regulations, including the imposition of economic or trade sanctions affecting international commercial transactions; • risk of non- compliance with anti- bribery laws and regulations, such as the U. S. Foreign Corrupt Practices Act; • restrictions on, or difficulties and costs associated with, the repatriation of cash from foreign countries to the United States; • unfavorable currency fluctuations; • changes in local economic conditions, including inflation levels exceeding that of the U. S.; • unexpected changes in political or regulatory environments; • labor compliance and costs associated with a global workforce; • data privacy regulations; • difficulties in maintaining overseas subsidiaries and international operations; and • challenges in protecting intellectual property rights. Any one or more of the above factors could have a material adverse effect on our business ~~, financial condition or results of operations. Public Health Crisis — A pandemic, epidemic, or other outbreak of infectious disease, including the COVID- 19 pandemic and the global response to the pandemic, including without limitation complying with governmental mandates, could have a material adverse impact on our business, financial condition, or results of operations. The COVID- 19 global pandemic, and the various governmental, business, and consumer responses to this pandemic, have caused significant disruptions in the U. S. and global economies, which negatively impacted the demand for several of the products produced by our Chlor Alkali Products and~~

~~Vinyls and Epoxy businesses. The COVID- 19 pandemic has significantly impacted our results of operations and could continue to have negative impacts on our business. These impacts could include plant closures or operating reductions, volatility and decrease in demand for our products, and supply chain interruptions. These impacts could become more widespread or prolonged as the pandemic continues or evolves over time. The extent to which the COVID- 19 pandemic impacts our results will depend on future developments that are outside of our control and highly uncertain, including the severity and duration of the pandemic, emerging variants, vaccine and booster effectiveness, the domestic and international actions that are taken in response, including mandates implemented at the local, state and federal levels, and the extent and severity of any resulting economic or industry downturn. Other public health crises, including but not limited to pandemics, including additional COVID- 19 variants, epidemics or other outbreaks of infectious diseases, and the various governmental, business, and consumer responses to the public health crisis could have a material adverse effect on our business, financial condition or results of operations~~ . Indebtedness — Our indebtedness could **materially** adversely affect our **business** ~~financial condition~~ . As of December 31, ~~2022~~ **2023** , we had $ 2, ~~580~~ **670** . ~~7~~ **1** million of indebtedness outstanding. Outstanding indebtedness does not include amounts that could be borrowed under our ~~$ 1, 200. 0 million~~ Senior Revolving Credit Facility **with aggregate commitments of $ 1, 200. 0 million (Senior Revolving Credit Facility)** . As of December 31, ~~2022~~ **2023** , our indebtedness represented ~~50~~ **54** . ~~4~~ **1** % of our total capitalization and $ ~~9~~ **78** . ~~7~~ **8** million of our indebtedness was due within one year. Despite our level of indebtedness, we expect to continue to have the ability to borrow additional debt, but we cannot be certain that additional debt will be available on terms acceptable to us or at all. Our indebtedness could have important consequences, including but not limited to: • limiting our ability to fund working capital, capital expenditures, and other general corporate purposes; • limiting our ability to accommodate growth by reducing funds otherwise available for other corporate purposes, which in turn could prevent us from fulfilling our obligations under our indebtedness; • limiting our operational flexibility due to the covenants contained in our debt agreements; • to the extent that our debt is subject to floating interest rates, increasing our vulnerability to fluctuations in market interest rates; • limiting our ability to pay cash dividends; • limiting our ability to approve or execute share repurchase programs; • limiting our flexibility for, or reacting to, changes in our business or industry or economic conditions, thereby limiting our ability to compete with companies that are not as highly leveraged; and • increasing our vulnerability to economic downturns. Our ability to generate sufficient cash flow from operations to make scheduled payments on our debt will depend on a range of economic, competitive and business factors, many of which are outside our control. There can be no assurance that our business will generate sufficient cash flow from operations to make these payments. If we are unable to meet our expenses and debt obligations, we may need to refinance all or a portion of our indebtedness before maturity, sell assets or issue additional equity. We may not be able to refinance any of our indebtedness, sell assets or issue additional equity on commercially reasonable terms or at all, which could cause us to default on our obligations and impair our liquidity. Our inability to generate sufficient cash flow to satisfy our debt obligations, or to refinance our debt obligations on commercially reasonable terms, would have a material adverse effect on our business, ~~financial condition and results of operations,~~ as well as on our ability to satisfy our debt obligations. Credit Facility — Weak industry conditions could affect our ability to comply with the financial maintenance covenants in our senior credit facility. Our senior credit facility includes certain financial maintenance covenants requiring us to not exceed a maximum leverage ratio and to maintain a minimum coverage ratio. Depending on the magnitude and duration of economic or industry downturns affecting our businesses, including deterioration in prices and volumes, there can be no assurance that we will continue to be in compliance with these ratios. If we fail to comply with either of these covenants in a future period and are not able to obtain waivers from the lenders, we would need to refinance our current senior credit facility **or our ability to borrow under this facility may be limited** . However, there can be no assurance that such refinancing would be available to us on terms that would be acceptable to us or at all. Credit and Capital Market Conditions — Adverse conditions in the credit and capital markets may limit or prevent our ability to borrow or raise capital. While we believe we have facilities in place that should allow us to borrow funds as needed to meet our ordinary course business activities, adverse conditions in the credit and financial markets could prevent us from obtaining financing, if the need arises, or result in our creditors terminating their funding commitments. Our ability to invest in our businesses and refinance or repay maturing debt obligations could require access to the credit and capital markets and sufficient bank credit lines to support cash requirements. Our ability to access credit and capital markets can also depend on our credit rating as determined by reputable credit rating agencies. A significant downgrade in our credit rating could affect our ability to refinance or repay maturing debt obligations, result in increased borrowing costs, decrease the availability of capital from financial institutions or require our subsidiaries to post letters of credit, cash or other assets as collateral with certain counterparties. If we are unable to access the credit and capital markets on commercially reasonable terms, we could experience a material adverse effect on our business ~~, financial position or results of operations~~ . Pension Plans — The impact of declines in global equity and fixed income markets on asset values and any declines in interest rates and / or improvements in mortality assumptions used to value the liabilities in our pension plans may result in higher pension costs and the need to fund the pension plans in future years in material amounts. We sponsor domestic and foreign defined benefit pension plans for eligible employees and retirees. Substantially all domestic defined benefit pension plan participants are no longer accruing benefits. However, a portion of our bargaining hourly employees continue to participate in our domestic qualified defined benefit pension plans under a flat- benefit formula. Our funding policy for the qualified defined benefit pension plans is consistent with the requirements of federal laws and regulations. Our foreign subsidiaries maintain pension and other benefit plans, which are consistent with local statutory practices. The determinations of pension expense and pension funding are based on a variety of rules and regulations along with economic factors which are outside of our control. These factors include returns on invested assets, the level of certain market interest rates, the discount rates used to determine pension obligations and mortality assumptions used to value liabilities in our pension plans. Changes in these rules and regulations or unfavorable changes to the factors which are used to value the assets and liabilities in our pension plans could impact the calculation of funded status of our pension plans. They may also result in higher pension costs and the need for additional pension plan funding. See " Pension and Postretirement Benefits " contained in Item 7 — " Management' s Discussion and Analysis of Financial Condition and Results of Operations. " Asset Impairment — If our goodwill, other intangible assets or property, plant and equipment become impaired in the future, we may be required to record non- cash charges to earnings, which could be significant. The process of impairment testing for our goodwill involves a number of judgments and estimates made by management including future cash flows, discount rates, profitability assumptions and terminal growth rates with regards to our reporting units. Our internally generated long- range plan includes assumptions regarding pricing and operating forecasts for the chlor alkali industry. If the judgments and estimates used in our analysis are not realized or are affected by external factors, then actual results may not be consistent with these judgments and estimates, and we may be required to record a goodwill impairment charge in the future, which could be significant and have ~~an~~ **a material** adverse effect on our **business** ~~financial position and results of operations. During 2020, the carrying values of our Chlor Alkali Products and Vinyls and Epoxy reporting units exceeded the fair values which resulted in pre- tax goodwill impairment charges of $ 557. 6 million and $ 142. 2 million, respectively. The goodwill impairment charge was calculated as the amount that the carrying value of the reporting unit, including any goodwill, exceeded its fair value and therefore the carrying value of our reporting units equal their fair value upon completion of the goodwill impairment test~~. We review long- lived assets, including property, plant and equipment and identifiable amortizing intangible assets, for impairment whenever changes in circumstances or events may indicate that the carrying amounts are not recoverable. If the fair value is less than the carrying amount of the asset, an impairment is recognized for the difference. Factors which may cause an impairment of long- lived assets include significant changes in the manner of use of these assets, negative industry or market trends, a significant underperformance relative to historical or projected future operating results, extended period of idleness or a likely sale or disposal of the asset before the end of its estimated useful life. If our property, plant and equipment and identifiable amortizing intangible assets are determined to be impaired in the future, we may be required to record non- cash charges to earnings during the period in which the impairment is determined, which could be significant and have ~~an~~ **a material** adverse effect on our **business** ~~financial position and results of operations~~. Legal, Environmental and Regulatory Risks Effects of Regulation — Changes in or failure to comply with applicable laws or government regulations or policies could have a material adverse effect on our **business** ~~financial position or results of operations~~. Legislation or regulations that may be adopted or modified by U. S. or foreign governments **that affect products we produce could significantly affect the sales, costs and profitability of our business**, including legislation or regulations intended to address **antitrust and competition, the environment,** climate change, ~~the environment, antitrust and competition, tax~~ **taxes**, international trade matters through import and export duties and quotas and anti- dumping measures and related tariffs ~~could significantly affect the sales, costs and profitability of our business~~. The chemical and ammunition industries are subject to extensive legislative and regulatory actions, which could have a material adverse effect on our business ~~, financial position or results of operations~~. Many of our products and operations are subject to chemical control laws of the countries in which they are located. These laws include regulation of chemical substances and inventories under the U. S. Toxic Substances Control Act of 1976 (TSCA) in the U. S. and the Registration, Evaluation and Authorization of Chemicals (REACH) regulation in Europe **. Likewise, Congress and government agencies also periodically consider legislation and other regulations related to the ammunition business, and legislative or regulatory actions could affect our ability to manufacture and sell certain types of ammunition, including restrictions on exports to certain countries**. TSCA was amended in 2016, and the U. S. Environmental Protection Agency (EPA) is currently evaluating several of our products and manufacturing processes for additional regulation under the amended law. Certain of our products, or inputs into our manufacturing process, are subject to regulation under current TSCA regulations, and other chemicals or ingredients may be regulated under the law in the future. In 2022, the EPA proposed a regulation that would ban the use of asbestos, a principal material used in diaphragm- based chlorine manufacturing in as soon as two years following publication of a final rule. Diaphragm technology- based chlorine production makes up a significant part of Olin' s capacity and this proposed government regulation could significantly increase the cost of production **or cause us to close production capacity** that would have negative consequences on our business. The EPA has found " unreasonable risk " associated with several of Olin' s chlorinated ~~organics~~ **organic** products under the new TSCA law and we anticipate proposed rules from the EPA on these products also present risk to these businesses. Olin also anticipates future regulatory action related to EDC under the amended TSCA law that could significantly affect the sales, costs and profitability of that product line ~~. Additionally, the U. S. Congress has proposed legislation that would restrict our ability to import, process and use asbestos in our chlorine manufacturing. While final passage of the legislation is not anticipated, congressional action on this issue could have a material adverse impact our business, financial condition and results of operations. Likewise, Congress and government agencies routinely consider legislation and regulation related to the ammunition business, and legislative or regulatory actions could impact our ability to manufacture and sell certain types of ammunition~~. Under REACH, additional testing requirements, documentation, risk assessments and registrations are occurring and will continue to occur and may adversely affect our costs of products produced in or imported into the European Union. The European Union is currently considering regulations related to the use of bisphenol ~~(BisA)~~, or BPA, in chemical manufacturing, which is a critical component of the epoxy resins we manufacture and sell in the region. Compliance with current or future TSCA, REACH, or other regulations may limit or hinder our ability to manufacture our products and / or cause us to incur expenditures that are material to our business ~~, financial condition or results of operations~~. Additionally, changes to government regulations and laws, including TSCA and REACH, or changes in their interpretation may reduce the demand for our products, impact our ability to use or manufacture certain products, or limit our ability to implement our strategies, any of which could have a material adverse effect on our business ~~, financial condition and results of operations~~. A material change in tax laws, treaties or regulations in the jurisdictions in which we operate or a change in their interpretation or application could have a material adverse effect on our business ~~, financial condition and results of operations~~. Security and Chemicals Transportation — New regulations on the transportation of hazardous chemicals and / or the security of chemical manufacturing facilities and public policy changes related to transportation safety could result in significantly higher operating costs. The transportation of our products and feedstocks, including transportation by pipeline, and the security of our chemical manufacturing facilities are subject to extensive regulation. Government authorities at the local, state and federal levels could implement new or stricter regulations, or change their interpretations of existing regulations, that would impact the security of chemical plant locations and the transportation of hazardous chemicals. Our Chlor Alkali Products and Vinyls and Epoxy segments could be adversely ~~impacted~~ **affected** by the cost of complying with any new regulations. Our business also could be adversely affected if an incident were to occur at one of our facilities or while transporting products. The extent of the impact would depend on the requirements of future regulations and the nature of an incident, which are unknown at this time. Legal and Regulatory Claims and Proceedings — We are subject to legal and regulatory claims and proceedings, which could cause us to incur significant expenses. We are subject to legal and regulatory claims and proceedings relating to our present and former operations and could become subject to additional claims in the future, some of which could be material. These proceedings may be brought by the government or private parties and may arise out of a number of matters, including, antitrust claims, contract disputes, product liability claims, including ammunition and firearms, and proceedings alleging injurious exposure of plaintiffs to various chemicals and other substances (including proceedings based on alleged exposures to asbestos). Frequently, the proceedings alleging injurious exposure involve claims made by numerous plaintiffs against many defendants. Defense of these claims can be costly and time- consuming even if ultimately successful. Because of the inherent uncertainties of legal proceedings, we are unable to predict their outcome and therefore cannot determine whether the financial ~~impact~~ **effect** , if any, will be material to our **business** ~~financial position, cash flows or results of operations~~ . We have included additional information with respect to pending legal and regulatory proceedings in Part II, Item 8, under the heading of " Legal Matters " within Note ~~22~~ **23** , " Commitments and Contingencies, " of our Notes to Consolidated Financial Statements. Environmental Costs — We have ongoing environmental costs, which could have a material adverse effect on our **business** ~~financial position or results of operations~~ . Our operations and assets are subject to extensive environmental, health and safety regulations, including laws and regulations related to air emissions, water discharges, waste disposal and remediation of contaminated sites. The nature of our operations and products, including the raw materials we handle, exposes us to the risk of liabilities, obligations or claims under these laws and regulations due to the production, storage, use, transportation and sale of materials that can adversely impact the environment or cause personal injury, including, in the case of chemicals, unintentional releases into the environment. Environmental laws may have a significant effect on the costs of use, transportation, handling and storage of raw materials and finished products, as well as the costs of storage, handling, treatment, transportation and disposal of wastes. In addition, we are party to various government and private environmental actions associated with past manufacturing facilities and former waste disposal sites. We have incurred, and expect to incur, significant costs and capital expenditures in complying with environmental laws and regulations. The ultimate costs and timing of environmental liabilities are difficult to predict. Liabilities under environmental laws relating to contaminated sites can be imposed retroactively and on a joint and several basis. One liable party could be held responsible for all costs at a site, regardless of fault, percentage of contribution to the site or the legality of the original disposal. We could incur significant costs, including clean- up costs, natural resource damages, civil or criminal fines and sanctions and third- party lawsuits claiming, for example, personal injury and / or property damage, as a result of past or future violations of, or liabilities under, environmental or other laws. In addition, future events, such as changes to environmental laws, changes in the interpretation or implementation of current environmental laws or new information about the extent of remediation required, could require us to make additional expenditures, modify or curtail our operations and / or install additional pollution control equipment. It is possible that regulatory agencies may identify new chemicals of concern or enact new or more stringent clean- up standards for existing chemicals of concern. This could lead to expenditures for environmental remediation in the future that are additional to existing estimates. Accordingly, it is possible that some of the matters in which we are involved or may become involved may be resolved unfavorably to us, which could **have a** ~~materially~~ -- **material** ~~and adversely~~ -- **adverse** ~~affect~~ **effect on** our business ~~, financial position, cash flows or results of operations~~ . See " Environmental Matters " contained in Item 7 — " Management' s Discussion and Analysis of Financial Condition and Results of Operations. " ~~,financial condition or results of operations.~~ Governmental Contract Compliance and Deliverables — Various risks associated with our Lake City contract and performance under other government contracts could **materially** adversely affect our business ~~,financial condition and results of operations~~ .Our Winchester business currently operates and manages the Lake City Army Ammunition Plant in Independence,MO under a multi- year contract with the ~~United States~~ **U.S.** Army.The contract has an initial term of seven years,starting on October 1,2020,and may be extended for up to three additional years.Additionally,our Winchester business is engaged to perform various deliverables under other government contract arrangements.The Lake City facility also allows,under certain conditions,for Winchester to utilize the facility to produce commercial ammunition.The operation of the Lake City facility and our other U.S.government contracts require compliance with numerous contract provisions and government regulations.U.S.government contracts often reserve the right to audit our contract costs and conduct inquiries and investigations of our business practices and compliance with government contract requirements. **In some cases,audits may result in delayed payments or contractor costs not being reimbursed or subject to repayment.** Our failure to comply with any one of these contract provisions and regulations could have a material adverse ~~impact~~ **effect** on our business ~~,financial position,and results of operations~~ .A large portion of our government contracts contain fixed- price deliverables while a smaller portion are performed under cost- plus arrangements.While certain of these contracts contain price escalation and other price adjustment provisions,if we are unable to control costs related to these contracts or if our assumptions regarding the fixed pricing on one or multiple of these contracts is incorrect,we may experience lower profitability, **materially** adversely affecting our business **.** ~~,financial condition~~ Labor Matters — We cannot assure that we can conclude future labor contracts or any other labor agreements without work stoppages. Various labor unions represent a significant number of our hourly paid employees for collective bargaining purposes. ~~The following significant~~ **In 2024, we have no** labor ~~contract will be~~

~~required~~ **agreements that are due** to **expire** ~~be negotiated~~ in **the U. S.** ~~2023: LocationPercent of Global WorkforceExpiration DateFreeport~~ , ~~TX5~~ **and one labor agreement expiring in Canada, representing approximately 1** % **of our global workforce.** ~~May 2023Niagara Falls, NY1 % July 2023~~ In addition, a large number of our employees are located in countries in which employment laws provide greater bargaining or other rights to employees than the laws of the U. S. Such employment rights require us to work collaboratively with the legal representatives of those employees to effect any changes to labor arrangements. For example, most of our employees in Europe are represented by works councils that must approve any changes in conditions of employment, including salaries and benefits and staff changes, and may impede efforts to restructure our workforce. While we believe our relations with our employees and their various representatives are generally satisfactory, we cannot assure that we can conclude any labor agreements without work stoppages and cannot assure that any work stoppages will not have a material adverse effect on our business , financial condition or results of operations......, financial condition and results of operations . Environmental, Social and Governance (ESG) — ESG issues and related ~~regulation~~ **regulations** , including those related to climate change and sustainability, may have ~~an~~ **a materially** adverse effect on our business ~~, financial condition and results of operations and damage our reputation~~ . Companies across all industries are facing increased scrutiny related to their ESG policies and practices. Increased focus and activism related to ESG may hinder our access to credit and capital markets, as investors may reconsider their investment as a result of their assessment of our ESG policies and practices. In particular, customers, consumers, investors and other stakeholders are increasingly focusing on environmental issues, including climate change, energy and water use, greenhouse gas (GHG) emissions and other sustainability concerns. Change in public sentiment may result in changing demands for our customers' products and the products which we produce in light of their perceived environmental impacts or other related issues. These demand changes could cause changes in the market dynamics of our existing products, impacting pricing, or we may incur additional costs to make changes to our operations to comply with such demand changes. Concern over climate change, GHG emissions in particular, may result in new or increased legal and regulatory requirements to reduce or mitigate impacts to the environment. Increased regulatory requirements or demands for enhanced mitigation of environmental impacts may result in increased compliance costs, including capital expenditures, higher energy and raw materials input costs or compliance with more stringent emissions standards, which may cause disruptions in the manufacture of our products or an increase in operating costs. Any failure to achieve our ESG goals, or a perception of our failure to act responsibly with respect to the environment or to effectively respond to new, or updated, legal or regulatory requirements concerning environmental or other ESG matters, or increased operating or manufacturing costs due to increased regulation or efforts to mitigate environmental impacts could **have a material** ~~adversely~~ -- **adverse** ~~affect~~ **effect on** our business ~~, financial condition, results of operations and reputation~~ .