

Risk Factors Comparison 2024-02-21 to 2023-02-22 Form: 10-K

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The following risks should be considered together with the other information contained in this Report and all of the information set forth in our filings with the SEC. If any of the following risks or uncertainties develops into actual events, our petroleum and / or nitrogen fertilizer businesses, financial conditions, or results of operations could be materially adversely affected. References to “CVR Energy”, the “Company”, “we”, “us”, and “our” may refer to consolidated subsidiaries of CVR Energy, including CVR Partners, as the context may require. Risks Related to Our Entire Business Certain developments in the global oil markets have had, and may continue to have, material adverse impacts on the operations, business, financial condition, liquidity, and results of operations of the Company or its customers, suppliers, and other counterparties. Although there has been discussions among members of OPEC to stabilize oil prices, declines in the market prices of crude oil and certain other petroleum products below the carrying cost of such commodities in the Company’s inventory have required, and may continue to require, the Company to adjust the value of, and record a loss on, certain inventories, which has had, and may continue to have a negative impact on our operating income; adversely impact our ability to profitably operate our facilities, and our results of operations, such as revenues and cost of sales; could result in significant financial constraints on certain producers from which we acquire our crude oil; and could result in an increased risk that customers, lenders, and other counterparties may be unable to fulfill their obligations in a timely manner, or at all. Further, if general economic conditions continue to remain uncertain for an extended period of time, our liquidity and ability to repay our outstanding debt may be harmed and the trading price of our common stock, which has seen recent volatility, may decline. Our petroleum and nitrogen fertilizer businesses are, and commodity prices are, cyclical and highly volatile, which could have a material adverse effect on our results of operations, financial condition and cash flows. Our Petroleum Segment’s financial results are primarily affected by margin between refined product prices and prices for crude oil and other feedstocks. Historically, refining margins have been volatile and vary by region, and we believe they will continue to be volatile in the future. Our cost to acquire feedstocks and the price at which we can ultimately sell refined products depend upon several factors beyond our control, including regional and global supply of and demand for crude oil, gasoline, diesel, and other feedstocks and refined products. These in turn depend on, among other things, the availability and quantity of imports, the production levels of U. S. and international suppliers, levels of refined petroleum product inventories, productivity and growth (or the lack thereof) of U. S. and global economies, U. S. relationships with foreign governments, political affairs, and the extent of governmental regulation. Profitability of some of our products, like renewable diesel, are also dependent upon government subsidies including carbon and tax credits, which may be reduced or eliminated. We do not produce crude oil and must purchase all of the crude oil we refine long before we refine it and sell the refined products to our customers. Price level changes during the period between purchasing feedstocks and selling the refined petroleum products from these feedstocks could have a significant effect on our financial results. A decline in market prices in of these feedstocks may negatively impact the carrying value of our inventories. Price level changes during the period between purchasing feedstocks and selling the refined petroleum products from these feedstocks could have a significant effect on our financial results. A decline in market prices in these feedstocks may negatively impact the carrying value of our inventories. Our Petroleum Segment profitability is also impacted by the ability to purchase crude oil at a discount to benchmark crude oils, such as WTI. Crude oil differentials can fluctuate significantly based upon overall economic and crude oil market conditions. Adverse changes in crude oil differentials can adversely impact our refining margins, earnings and cash flows. In addition, the Petroleum Segment’s purchases of crude oil, although based on WTI prices, have historically been at a discount to WTI because of the proximity of the Refineries to the sources, existing logistics infrastructure, and quality differences. Any changes to these factors could result in a reduction of the discount to WTI and may result in a reduction of the Petroleum Segment’s cost advantage. Our Nitrogen Fertilizer Segment is exposed to fluctuations in nitrogen fertilizer demand in the agricultural industry. These fluctuations historically have had, and could in the future have, significant effects on prices across all nitrogen fertilizer products and, in turn, our results of operations, financial condition and cash flows. Nitrogen fertilizer products are commodities, ~~December 31, 2022 | 24~~ **the** price of which can be highly volatile. The prices of nitrogen fertilizer products depend on a number of factors, including general economic conditions, cyclical trends in end- user markets, supply and demand imbalances, governmental policies, and weather conditions, which have a greater relevance because of the seasonal nature of fertilizer application. If seasonal demand **December 31, 2023 | exceeds 25exceeds** the projections on which we base our production levels, customers may acquire nitrogen fertilizer products from competitors, and our profitability may be negatively impacted. If seasonal demand is less than expected, we may be left with excess inventory that will have to be stored or liquidated. The international market for nitrogen fertilizers is influenced by such factors as the relative value of the U. S. dollar and its impact upon the cost of importing nitrogen fertilizers, foreign agricultural policies, the existence of, or changes in, import or foreign currency exchange barriers in certain foreign markets, changes in the hard currency demands of certain countries, and other regulatory policies of foreign governments, as well as the laws and policies of the U. S. affecting foreign trade and investment. Supply is affected by available capacity and operating rates, raw material costs, government policies, and global trade. A decrease in nitrogen fertilizer prices would have a material adverse effect on our nitrogen fertilizer business and cash flow, including CVR Partners’ ability to make distributions. Petroleum and nitrogen fertilizer businesses face intense competition. The refining industry is highly competitive with respect to both crude oil and other feedstock supply and refined petroleum product markets. We compete with many companies for available supplies of crude oil and other feedstocks and for sites for our refined petroleum products. Our Petroleum Segment may be unable to compete effectively with competitors within and outside

of the industry, which could result in reduced profitability. In contrast to many of our competitors, we do not have a retail business and therefore are dependent upon others for outlets for our refined products, and we do not have arrangements exceeding a twelve-month period for much of our petroleum output and thus cannot offset losses from refining operations with profits from retail operations and may be less able to withstand periods of depressed refining margins or feedstock shortages. Some of our competitors also have materially greater financial and other resources than us and a greater ability to bear the economic risks inherent in our industry. In addition, our Petroleum Segment competes with other industries that provide alternative means to satisfy the energy and fuel requirements of its industrial, commercial, and individual customers. There are presently significant governmental incentives and consumer pressures to increase the use of alternative fuels in the United States. The more successful these alternatives become as a result of governmental incentives or regulations, technological advances, consumer demand, improved pricing, or otherwise, the greater the negative impact on pricing and demand for our products and profitability. Our renewables business faces competition from other renewable fuel producers. In recent years, there has been an increase in renewable fuel capacity and production as new renewables projects have come online, which impacts the prices at which we are able to sell renewable fuel. With an increase in renewable fuel projects in recent years, we also face competition for renewable feedstocks. The prices at which we sell renewable fuel and buy renewable feedstock are therefore volatile and beyond our control and could adversely affect our renewables margin and results. Our Nitrogen Fertilizer Segment is subject to intense price competition from both U. S. and foreign sources. With little or no product differentiation, customers make their purchasing decisions principally on the basis of delivered price and availability of the product. Increased global supply or decreases in transportation costs for foreign sources of fertilizer may put downward pressure on fertilizer prices. We compete with a number of U. S. producers and producers in other countries, including state-owned and government-subsidized entities that may have greater total resources and are less dependent on earnings from fertilizer sales, which make them less vulnerable to industry downturns and better positioned to pursue new expansion and development opportunities. In addition, imports of fertilizer from other countries may be unfairly subsidized, as **determined by** was found to be the case **U. S. Department of Commerce** on November 30, **June 24, 2021-2022** by the U. S. Department of Commerce (the “USDOC”) with respect to UAN imports from Russia and Trinidad **and Tobago. On July 18, 2022, the U. S. International Trade Commission ultimately voted against imposing import tariffs on UAN from Russia and Trinidad and Tobago and, accordingly, the U. S. Department of Commerce will not issue countervailing duty orders and anti-dumping duty orders on UAN imports from the same countries**. An inability to compete successfully could result in a loss of customers, which could adversely affect our sales, profitability, and cash flows, and therefore, have a material adverse effect on our results of operations and financial condition. Our businesses are geographically concentrated, creating exposure to regional economic downturns and seasonal variations **for us or our customers**, which may affect our production levels, transportation costs, and inventory and working capital levels. Our Refineries are both located in the southern portion of Group 3 of the PADD II region, and we primarily market refined products in a relatively limited geographic area. As a result, our Petroleum Segment is more susceptible to regional economic conditions than the operations of more geographically diversified competitors, and any unforeseen circumstances that affect our December 31, **2022-2023, 25-26** operating area could also materially adversely affect our revenues and cash flows. These factors include, among other things, changes in the economy, weather conditions, demographics and population, increased supply of refined products from competitors, and reductions in the supply of crude oil. In addition, if we deliver refined products to customers outside of the region, we may incur considerably higher transportation costs, resulting in lower refining margins, if any. Our Nitrogen Fertilizer Segment’s sales to agricultural customers are concentrated in the Great Plains and Midwest states, and nitrogen fertilizer demand is seasonal. Our quarterly results may vary significantly from one year to the next due to weather-related shifts in planting schedules and purchase patterns. Because we build inventory during low demand periods, the accumulation of inventory to be available for seasonal sales creates significant seasonal working capital and storage capacity requirements. The degree of seasonality can change significantly from year-to-year due to conditions in the agricultural industry and other factors. As a consequence of this seasonality, distributions by our Nitrogen Fertilizer Segment of available cash, if any, may be volatile and may vary quarterly and annually. Public health crises such as the COVID-19 pandemic have had, and may continue to have, adverse impacts on our business, financial condition, results of operations, and liquidity. The economic effects from **public health crises such as** the COVID-19 pandemic on our business were and may again be significant. Although there has been a recovery since the onset of the pandemic in March 2020, there continues to be uncertainty and unpredictability about the lingering impacts to the worldwide economy that could negatively affect our business, financial condition, results of operations, and liquidity in future periods. The extent to which the pandemic and its **ongoing** effects may adversely impact our future business, financial, and operating results, and for what duration and magnitude, depends on factors that are continuing to evolve, are difficult to predict and, in many instances, are beyond our control. The ultimate outcome of these and other factors may result in many adverse consequences including, but not limited to, **reduced availability of critical staff**, disruption or delays to supply chains for critical equipment or feedstock, inflation, increased interest rates, **reduced economic activity that negatively impacts demand for our products**, and increased administrative, compliance, and operational costs. In addition, future public health crises could also result in significant economic disruption and other effects that adversely impact our business, financial condition, results of operations, and liquidity in future periods in ways similar to the COVID-19 pandemic. The adverse impacts of the COVID-19 pandemic had, and may continue to have, the effect of precipitating or heightening many of the other risks described in this section. Both the Petroleum and Nitrogen Fertilizer Segments depend on significant customers, the loss of which may have a material adverse impact on our results of operations, financial condition and cash flows. The Petroleum and Nitrogen Fertilizer Segments both have a significant concentration of customers. The two largest customers of our Petroleum Segment represented **25-27%** of its net sales for the year ended December 31, **2022-2023**. The two largest customers of the Nitrogen Fertilizer Segment represented approximately **30-25%** of its net sales for the same period. Given the nature of our businesses, and consistent with industry

practice, we do not have long- term minimum purchase contracts with our customers. The loss of one or more of these significant customers, or a significant reduction in purchase volume by any of them, for any reason including, but not limited to, a desire to purchase competing products with lower emissions, could have a material adverse effect on our results of operations, financial condition and cash flows. If licensed technology were no longer available **or able to be licensed economically or at all**, our business may be adversely affected. We have licensed ~~and may in the future license~~, a combination of patent, trade secret, and other intellectual property rights of third parties for use in our plant operations. If our use of technology on which our operations rely were to be terminated or face infringement claims, licenses to alternative technology may not be available, may only be available on terms that are not commercially reasonable or acceptable, or in the case of infringement may result in substantial costs, all of which could have a material adverse effect on our results of operations, financial condition and cash flows. **In addition, we may identify in the future additional third- party intellectual property that we believe is necessary to our operations. The licensing or acquisition of third- party intellectual property rights is a competitive area, and several companies may pursue strategies to license or acquire third- party intellectual property rights that we may consider attractive or necessary, with the result that such intellectual property may not be available on economic terms or at all. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. Even if such licenses are available, we may be required to pay the licensor substantial royalties based on sales of our products, and such licenses may be non- exclusive, which December 31, 2023 | 27 could give our competitors access to the same intellectual property licensed to us. Any of the foregoing could have a material adverse effect on our competitive position, results of operations, financial condition and cash flows.** Compliance with and changes in environmental laws and regulations, including those related to climate change and the ongoing “ energy transition ”, could result in increased operating costs and capital expenditures and changes in demand for the products we produce. Our operations are subject to extensive federal, state, and local environmental laws and regulations relating to the protection of the environment, including those governing the emission or discharge of pollutants into the environment, climate change and the ongoing energy transition, product use and specifications, and the generation, treatment, storage, transportation, ~~December 31, 2022 | 26~~ disposal, and remediation of solid and hazardous wastes. Violations of applicable environmental laws and regulations or of the conditions of permits issued thereunder can result in substantial penalties, injunctive orders compelling installation of additional controls or other injunctive relief, civil and criminal sanctions, operating restrictions, permit revocations, and / or facility shutdowns, which may have a material adverse effect on our ability to operate our facilities and accordingly our financial performance. In addition, new environmental laws and regulations, including as a result of climate change and the ongoing energy transition efforts, new interpretations of existing laws and regulations, or increased governmental enforcement of laws and regulations, could require us to make additional unforeseen expenditures. It is unclear the impact the Biden Administration will have on the laws and regulations applicable to us, however, measures to address climate change and reduce GHG emissions (including carbon dioxide, methane, and nitrous oxides) are in various phases of discussion or implementation and could affect our operations by requiring increased operating and capital costs and / or increasing taxes on GHG emissions. ~~There also have been international efforts seeking legally binding reductions in GHG emissions.~~ More aggressive efforts by governments and non- governmental organizations to put in place laws requiring or otherwise driving reductions in GHG emissions appear likely and any such future laws and regulations could result in increased compliance costs or additional operating restrictions applicable to our customers and / or us, and any increase in the prices of refined products resulting from such increased costs, GHG cap- and- trade programs or taxes on GHGs, could result in reduced demand for our refined petroleum products. For example, in August 2022, President Biden signed into law the Inflation Reduction Act of 2022 (the “ Inflation Reduction Act ”), which **directs the EPA to impose - impose** a charge on methane emissions from certain petroleum system facilities and could have an indirect impact on demand for the goods and services of our Petroleum Segment. **On January 26, 2024, the EPA issued a proposed rule to implement the methane emissions reduction program. Public comments on the proposal are due March 11, 2024.** Our business could also be impacted by governmental initiatives to incentivize the conservation of energy or the use of alternative energy sources. **For example, there have been a number of U. S. federal and state rulemakings encouraging or mandating electric vehicles or alternative fuel vehicles**. These initiatives to reduce energy consumption or incentivize a shift away from fossil fuels could reduce demand for hydrocarbons, thereby reducing demand for the products of our Petroleum Segment, and adversely impact our business, financial condition, results of operations and cash flows. There is also increased agency interest in polyfluoroalkyl substances or PFAS. In September 2022, the EPA proposed to designate two PFAS compounds as hazardous substances. If PFAS compounds are designated as hazardous substances, the EPA and states could have the ability to order remediation of those compounds and cost recovery at clean- up sites. The EPA and states could also have the authority to reopen closed sites which are shown to be impacted by these PFAS compounds. This could lead to increased monitoring obligations and potential liability related thereto. If we are unable to maintain sales of our products at a price that reflects such increased costs, or could result in reduced demand for our fertilizer and hydrocarbon products, there could be a material adverse effect on our business, financial condition and results of operations. Our facilities face significant risks due to physical damage hazards, environmental liability risk exposure, and unplanned or emergency partial or total plant shutdowns which could cause property damage and a material decline in production which may not be fully insured. If any of our facilities, logistics assets, or key suppliers sustain a catastrophic loss and operations are shutdown or significantly impaired, it would have a material adverse impact on our operations, financial condition and cash flows. Examples of unforeseen events and circumstances, which may not be within our control, include: (i) major unplanned maintenance requirements; (ii) catastrophic events caused by mechanical breakdown, electrical injury, pressure vessel rupture, explosion, contamination, fire, or natural disasters, including floods, windstorms, and other similar events; (iii) labor supply shortages or labor difficulties that result in a work stoppage or slowdown; (iv) cessation or suspension of a plant or specific operations **December 31, 2023 | 28** dictated by environmental authorities; (v) acts of terrorism, **cyberattacks** or other deliberate malicious acts; and (vi) an event or incident involving a large

clean-up, decontamination, or the imposition of laws and ordinances regulating the cost and schedule of demolition or reconstruction, which can cause significant delays in restoring property to its pre-loss condition. **For example, in May 2023, an explosion and resulting fire occurred at our Wynnewood Refinery, which resulted in injuries to two employees (one of whom subsequently passed away). Operations and equipment at the Wynnewood Refinery were not materially impacted by the incident; however, any similar events in the future or claims related to the Wynnewood Refinery incident could have a significant impact on the Company and its operations, may not be insured, and could be the subject of litigation or an enforcement action, which could result in significant expense to the Company and which could have a material adverse effect on our results of operations, financial condition and cash flow.** We are insured under casualty, environmental, property, and business interruption insurance policies. The property and business interruption policies insure our real and personal property. These policies are subject to limits, sub-limits, retention (financial and time-based), and deductibles. The application of these and other policy conditions could materially impact insurance recoveries and potentially cause us to assume losses which could impair earnings. There is potential for a common occurrence to impact both our Coffeyville Refinery and Coffeyville Fertilizer Facility, in which case the insurance limits and applicable sub-limits would apply to all damages combined. ~~December 31, 2022 | 27~~ There is finite capacity in the commercial insurance industry engaged in underwriting energy industry risk, and factors impacting cost and availability include: (i) losses in our industries, (ii) natural disasters (which could be exacerbated by climate change), (iii) specific losses incurred by us, and (iv) inadequate investment returns earned by the insurance industry. **In the future, certain insurance could become unavailable or available only for reduced amounts of coverage or at exorbitant costs.** If the supply of commercial insurance is curtailed or if commercial insurance companies decline to underwrite companies in the energy industry, we may not be able to continue our present limits of insurance coverage or obtain sufficient insurance capacity to adequately insure our risks **or we may determine that premium costs, in our judgement, do not justify such expenditures and instead increase our self-insurance.** We could incur significant costs in cleaning up contamination at **or associated with** our facilities. Our businesses handle petroleum and hazardous substances, and as a result, spills, discharges, or other releases of petroleum or hazardous substances into the environment may occur. Past or future spills related to any of our current or former operations and solid or hazardous waste disposal may give rise to liability (including for personal injury and property damage, penalties, strict liability and potential cleanup responsibility) to governmental entities or private parties under federal, state, or local environmental laws, as well as under common law. For example, we could be held strictly liable under CERCLA and similar state statutes for past or future spills without regard to fault or whether our actions were in compliance with the law at the time of the spills, including in connection with contamination associated with our current and former facilities, and facilities to which we transported or arranged for the transportation of wastes or byproducts containing hazardous substances for treatment, storage, or disposal. Such liability could have a material adverse effect on our results of operations, financial condition and cash flows and may not be covered by insurance. Remedial activities to address known environmental contamination are underway at three of our facilities, including the Coffeyville Refinery, the now-closed Phillipsburg terminal (which operated as a refinery until 1991), and the Wynnewood Refinery. We also have assumed the previous owner's responsibilities under certain administrative orders under RCRA related to contamination at or that originated from the Coffeyville Refinery and the Phillipsburg terminal. We continue to work with the applicable governmental authorities to implement remediation of these three sites on a timely basis. As of December 31, ~~2022~~ **2023**, we have established an accrual of approximately \$ ~~22~~ **19** million for probable and reasonably estimable obligations associated with ~~these sites~~ **environmental matters, approximately \$ 5 million of which is for remedial activities.** Regulations concerning the transportation, storage, and handling of hazardous chemicals and materials, ~~risks of terrorism, and the security of refineries and chemical manufacturing facilities~~ could result in higher operating costs. Our crude oil gathering division that operates as a motor carrier is subject to regulation by federal and various state agencies and possible regulatory and legislative changes that may affect the economics of the industry. Some of these possible changes include increasingly stringent fuel-economy environmental regulations, limits on vehicle weight and size, and increases to federal, state or local taxes, including taxes on motor fuels, which may increase our costs or adversely impact the recruitment of drivers. **December 31, 2023 | 29 Acts of terror or sabotage, threats of war, armed conflict, or war may have an adverse impact on our business, our future results of operations and our overall financial performance. Acts of sabotage or terrorist attacks (including cyberattacks), threats of war, armed conflict, or war, as well as events occurring in response to or in connection with such events may harm our business or have an adverse impact on our future results of operations and financial condition. For example, the conflict between Israel and Hamas, which began in October 2023, and the ongoing Russia-Ukraine war, pose significant geopolitical risks to global crude oil, fertilizer, and agriculture markets.** Critical infrastructure such as petroleum refining and chemical manufacturing facilities may be at greater risk of terrorist attacks than other businesses in the United States. As a result, the petroleum and chemical industries are subject to security regulations relating to physical and cyber security. ~~The, and the~~ costs of compliance therewith may have a material adverse effect on our ~~results of operations,~~ financial condition. **Further, uncertainty surrounding new or continued global hostilities or other sustained military campaigns, sanctions brought by the U. S. and other countries, and the possibility that infrastructure facilities could be direct targets of, or indirect casualties of, and an** ~~cash flows~~ **act of terror, armed conflict or war may affect our operations in unpredictable ways, including disruptions of crude oil supplies and markets for refined products. The long-term impacts of terrorist attacks and the threat of future terrorist attacks on the energy transportation industry in general, and on us in particular, are unknown. Increased security measures taken by us as a precaution against possible terrorist attacks or vandalism could result in increased costs to our business. In addition, disruption or significant increases in energy prices could result in government-imposed price controls. Further, changes in the insurance markets attributable to terrorist attacks, acts of sabotage or cyberattacks could make certain types of insurance more difficult for us to obtain. Moreover, the insurance that may be available to us may be significantly more**

expensive than our existing insurance coverage. Instability in the financial markets as a result of war, terrorism, sabotage or cyberattack could also affect our ability to raise capital, including our ability to repay or refinance debt.

Adverse weather conditions or other unforeseen developments could damage our facilities or logistics assets and impair our ability to produce and deliver our refined petroleum or nitrogen fertilizer products. The regions in which our facilities are located and in which our customers operate are susceptible to severe storms, including hurricanes, thunderstorms, tornadoes, floods, extended periods of rain, ice storms and snow, some of which we or our customers have experienced in recent years. Such inclement weather conditions or other unforeseen developments could damage our facilities or logistics assets. If such weather conditions prevail near our facilities or logistics assets, they could interrupt or undermine our ability to produce and transport products or to manage our business. **If events such as storms, including hurricanes, thunderstorms, tornadoes, floods,**

extended periods of rain, ice storms and snow become more intense or more frequent, they could have an adverse effect on our continued operations, as well as the operations of our suppliers and customers.

Regional occurrences, such as energy shortages or increases in commodity prices, **geological hazards,** and natural disasters, could also have a material adverse effect on our business, financial condition and results of operations. The physical effects of adverse weather conditions have the potential to directly affect our operations and result in increased costs related to our operations. Since climate change may change weather patterns and the severity of weather events, any such changes could consequently materially adversely affect our revenues and cash flows and the demand for our products by our customers. However, because the nature and timing of changes in extreme **December 31, 2022 | 28** weather events (such as increased frequency, duration, and severity) are uncertain, it is not possible for us to estimate reliably the future financial risk to our operations caused by these potential physical risks. If our access to transportation on which we rely for the supply of our feedstocks and the distribution of our products is interrupted, our inventory and costs may increase and we may be unable to **distribute our products** efficiently ~~distribute our~~ **or products at all**.

If one of the pipelines on which either of the Refineries relies for supply of crude oil or for distribution of fuel becomes inoperative, the Petroleum Segment would be required to use alternative pipelines or other transportation methods or increase inventory, which could increase its costs and result in lower production levels and profitability. Our Nitrogen Fertilizer business relies on railroad, trucking and barge companies to ship finished products to customers. Factors that could negatively impact transportation availability and have a material adverse effect on our results of operations, financial condition and ability to pay dividends include extreme weather conditions, work stoppages, delays, spills, and derailments, new regulations restricting movements or increasing costs. The limited number of companies available for ammonia transport may also impact the availability of transportation for our Nitrogen Fertilizer Segment's products. **December 31, 2023 | 30**

We may be unable to obtain or renew permits or approvals necessary for our operations, which could inhibit our ability to do business. Our businesses hold numerous environmental and other governmental permits and approvals authorizing operations at our facilities and future expansion of our operations is predicated upon the ability to secure approvals therefore. A decision by a government agency to deny or delay issuing a new or renewed material permit or approval, or to revoke or substantially modify an existing permit or approval, could have a material adverse effect on our ability to continue operations and on our financial condition, results of operations and cash flows. We are subject to strict laws and regulations regarding employee and process safety, and failure to comply with these laws and regulations could have a material adverse effect on our results of operations, financial condition and profitability. We are subject to the requirements of OSHA and comparable state statutes that regulate the protection of the health and safety of workers, the proper design, operation, and maintenance of our equipment, and require us to provide information about hazardous materials used in our operations. Failure to comply with these requirements may result in significant fines or compliance costs, which could have a material adverse effect on our results of operations, financial condition and cash flows.

Our business may suffer due to the departure of any of our key senior executives or other key employees. Furthermore, a shortage of skilled labor may make it difficult for us to maintain labor productivity. Our future performance depends to a significant degree upon our management team and key technical personnel. The loss or unavailability to us of any member of our management team or a key technical employee could significantly harm us. We face competition for these professionals from our competitors, our customers and other companies operating in our industry. To the extent that the services of members of our management team and key technical personnel would be unavailable to us for any reason, we may be required to hire other personnel to manage and operate our business. We may not be able to locate or employ such qualified personnel on acceptable terms, or at all. Furthermore, our operations require skilled and experienced laborers with proficiency in multiple tasks. A shortage of trained workers due to retirements or otherwise could have an adverse impact on productivity and costs and our ability to expand production in the event here is an increase in the demand for our products and services, which could adversely affect our operations.

A portion of our workforce is unionized, and we are subject to the risk of labor disputes, slowdowns or strikes, which may disrupt our business and increase our costs. As of December 31, **2022-2023**, approximately **43-42%** and **29-31%** of our Petroleum and Nitrogen Fertilizer Segment employees, respectively, were represented by labor unions under collective bargaining agreements. We may not be able to renegotiate our collective bargaining agreements when they expire on satisfactory terms or at all. A failure to do so may increase our costs. **For example, a labor union representing approximately 90 employees at our East Dubuque Fertilizer Facility went on strike in October 2023, after its collective bargaining agreement expired. While our East Dubuque Fertilizer Facility has been operating during the strike, in the event that the strike continues for a long duration, our operations could be negatively affected. See Part II, Item 7, "Company Overview — Other Events" for more information.**

In addition, our existing labor agreements may not prevent a strike or work stoppage at any of our facilities in the future, and any work stoppage could negatively affect our results of operations, financial condition and cash flows. In addition, there continues to be a tight labor market. Increases in remote work opportunities have also amplified the competition for employees and contractors. An inability to recruit, train, and retain adequate personnel, or the loss or departure of personnel with key skills or deep institutional knowledge for whom we are unable to find adequate replacements, may negatively impact our

business. Inflation has also caused and may in the future cause increases in employee-related costs, both due to higher wages and other compensation. **December 31, 2023 | 31** We are subject to cybersecurity risks and may experience cyber incidents resulting in disruption **or harm** to our businesses. We depend on internal and third-party information technology systems to manage and support our operations, and we collect, process, and retain sensitive and confidential customer information in the normal course of business. To protect our facilities and systems against and mitigate cyber risk, we have implemented several programs including externally performed cyber risk monitoring, audits and penetration testing and an information security training program, and we **completed** ~~are actively engaged in evaluating~~ the implementation of applicable Cybersecurity and Infrastructure Security Agency security standard guidelines **in 2023**. On an as needed basis, but no less than quarterly, we brief the Audit Committee of the Board on information security matters. Despite these measures (or those we may implement in the future), our facilities and these systems could be vulnerable to ~~December 31, 2022 | 29~~ security breaches, computer viruses, lost or misplaced data, programming errors, human errors, acts of vandalism, or other events. **Moreover, cyberattacks are expected to accelerate on a global basis in both frequency and magnitude as threat actors are becoming increasingly sophisticated in using techniques and tools (including artificial intelligence) that circumvent controls, evade detection and even remove forensic evidence of the infiltration**. A breach could also originate from or compromise **our customers', vendors', suppliers', or other** third-party networks outside of our control that could impact our business and operations, **and there can be no assurance that the systems of third parties have been designed to prevent or limit the effects of cyber incidents or attacks, will be sufficient to prevent or detect material consequences arising from such incidents or attacks, or to avoid a material adverse impact**. Although we implement controls on third-party connectivity to our systems, we have limited control in ensuring their systems consistently enforce strong cybersecurity controls. Any disruption of these systems or security breach or event resulting in the misappropriation, loss or other unauthorized disclosure of confidential information, whether by us directly or our third-party service providers, could damage our reputation, expose us to the risks of litigation and liability, disrupt our business, or otherwise affect our results of operations. **Our business is subject to complex and evolving laws, regulations and security standards regarding privacy, cybersecurity and data protection ("data protection laws"). Many of these data protection laws are subject to change and uncertain interpretation, and could result in claims, increased costs of operations, or other harm to our business. The constantly evolving regulatory and legislative environment surrounding data privacy and protection poses increasingly complex compliance challenges, and complying with such data protection laws could increase the costs and complexity of compliance. While we do not collect significant amounts of personal information from consumers, we do have personal information from our employees, job applicants and some third parties, such as contractors and distributors. Any failure, whether real or perceived, by us to comply with applicable data protection laws could result in proceedings or actions against us by governmental entities or others, subject us to significant fines, penalties, judgments, and negative publicity, require us to change our business practices, increase the costs and complexity of compliance, and adversely affect our business. Our compliance with emerging privacy / security laws, as well as any associated inquiries or investigations or any other government actions related to these laws, may increase our operating costs.** An increase in inflation could have adverse effects on our results of operations. Inflation in the United States increased beginning in the second half of 2021 and ~~has~~ continued into **the beginning of 2023**, due to a substantial increase in money supply, a stimulative fiscal policy, a significant rebound in consumer demand as COVID-19 restrictions were relaxed, the Russia-Ukraine ~~war~~ **conflict**, and worldwide supply chain disruptions resulting from the economic contraction caused by COVID-19 and lockdowns followed by a rapid recovery. **According to the Consumer Price Index, inflation** ~~inflation~~ rose from 5.4% in June 2021 to 7.0% in December 2021 to 8.2% in September 2022. As of ~~December 31, 2022~~ **and December 2023**, inflation was at 6.5% **and 3.4%, respectively**. An increase in inflation rates could negatively affect our profitability and cash flows, due to higher wages, higher operating costs, higher financing costs, and / or higher supplier prices. We may be unable to pass along such higher costs to our customers. In addition, inflation may adversely affect our customers' financing costs, cash flows, and profitability, which could adversely impact their operations and our ability to offer credit and collect receivables. Risks Related to the Petroleum Segment If our Petroleum Segment ~~loses~~ **is required to obtain its crude oil supply without** the benefit of a crude oil supply agreement **and significant** ~~or is unable to gather~~ **crude oil gathering** in the regions in which we operate, our exposure to the risks associated with volatile crude oil prices may increase, crude oil transportation costs could increase and our liquidity may be reduced. **December 31, 2023 | 32** Our Petroleum Segment obtains substantially all of its crude oil supply through crude oil gathering operations in Kansas and Oklahoma or through the crude oil intermediation agreement with ~~Vitol Inc~~ **Gunvor USA LLC**. The agreement, which currently extends through ~~December~~ **January 31, 2023-2026**, minimizes the amount of in-transit inventory and mitigates crude oil pricing risk by ensuring pricing takes place close to the time the crude oil is refined and the yielded products are sold. If we were required to obtain our crude oil supply without the benefit of crude oil located near the Refineries or ~~through~~ a supply intermediation agreement, our Petroleum Segment's exposure to crude oil pricing risk may increase, despite any hedging activity in which we engage (such as futures and swaps), crude oil transportation costs could increase and our liquidity could be negatively impacted due to increased inventory, potential need to post letters of credit, and negative impacts of market volatility. There is no assurance that our crude oil gathering operations will remain at current levels or that we will be able to renew or extend the ~~Vitol~~ **Gunvor** agreement beyond ~~December~~ **January 31, 2023-2026**. Crude oil production disruptions could have a material impact on the Petroleum Segment because in such an event, we may be unable to obtain an adequate supply of crude oil, or we may only be able to obtain crude oil at unfavorable prices and we may experience a reduction in liquidity and our results of operations could be materially adversely affected. Compliance with the Renewable Fuel Standard ("RFS") could have a material adverse effect on our business, financial condition and results of operations. The EPA has promulgated and implemented the RFS pursuant to the Energy Policy Act of 2005 and the EISA. Under the RFS program, a RIN is assigned to each gallon of renewable fuel produced in or imported into the United States. The RFS program sets annual mandates for the

volume of renewable fuels (such as ethanol and biodiesel) that must be blended into a refiner's transportation fuels. If a refiner of petroleum-based transportation fuels is unable to meet its renewable fuel mandate through blending and is not otherwise exempt from compliance, it must purchase RINs in the open market to meet its obligations under the RFS program. Our Petroleum Segment's obligated-party subsidiaries are exposed to the volatility in the market price of RINs, which can be extreme. We cannot predict the future prices of RINs. RIN prices are dependent upon a variety of factors, including EPA regulations, the availability of RINs for purchase, levels of transportation fuels produced, the mix of the petroleum business' petroleum products, our purchasing as well as the fuel blending performed at the Refineries and downstream terminals, all of which can vary significantly from period to period. RIN prices may also be impacted by the timing and content of the EPA's actions or inactions relating to the RFS and communications relating thereto, as well as the actions of market participants, such as non-obligated parties. We may also be adversely impacted by the timing by which we purchase RINs, either ratably or at all. ~~December 31, 2022~~ | ~~30~~ Also, we believe WRC, as a small refinery, should be entitled to exemptions from the RFS, and we may carry a RIN deficit while we pursue such exemptions in court. **The accounting treatment of such deficit may change over time and in response to court rulings.** If sufficient RINs are unavailable for purchase, if the Petroleum Segment has to pay a significantly higher price for RINs, if our legal actions relating to WRC's small refinery exemptions are not decided in our favor, or if our obligated-party subsidiaries are otherwise unable to meet the EPA's RFS mandates or is unable to participate in programs or receive exemptions relieving compliance with RFS obligations, our business, financial condition and results of operations could be materially adversely affected. Changes in our credit profile may affect our relationship with our suppliers, which could have a material adverse effect on our liquidity and ability to operate the Refineries at full capacity. Changes in our credit profile may affect the way crude oil suppliers view our ability to make payments and may induce them to shorten the payment terms for purchases or require us to post security. Given the large dollar amounts and volume of our crude oil and other feedstock purchases, a burdensome change in payment terms may have a material adverse effect on liquidity and our ability to make payments to suppliers. This, in turn, could cause us to be unable to operate the Refineries at full capacity. A failure to operate at full capacity could adversely affect our profitability and cash flows. The Petroleum Segment's commodity derivative **strategy and / or** contracts may limit potential gains, exacerbate potential losses, and involve other risks. We may enter into both short- and long- term commodity derivatives contracts to mitigate crack spread risk with respect to a portion of expected refined products production. However, hedging arrangements, if we are able to procure them, may fail to fully achieve this objective for a variety of reasons, including its failure to have adequate hedging contracts, if any, in effect at any particular time and the failure of hedging arrangements to produce the anticipated results. Moreover, such transactions may limit our ability to benefit from favorable changes in margins. In addition, our hedging activities may expose us to the risk of financial loss in certain circumstances, including instances in which the volumes of our actual use of crude oil or production of **December 31, 2023** | **33** the applicable refined products is less than the volumes subject to the hedging arrangement; accidents, interruptions in transportation, inclement weather, or other events cause unscheduled shutdowns or otherwise adversely affect a refinery, suppliers, or customers; the counterparties to our futures contracts fail to perform under the contracts; or a sudden, unexpected event materially impacts the commodity or crack spread subject to the hedging arrangement. As a result, ~~the effectiveness of~~ our risk mitigation strategy **and activities** could have a material adverse impact on our financial results and cash flows. If we are unable to complete capital projects at their expected costs, ~~and / or~~ in a timely manner **or at all**, or if the market conditions assumed in project economics deteriorate, our financial condition, results of operations or cash flows could be adversely affected. Equipment, even when properly maintained, may require significant capital expenditures and expenses to keep operating at optimum efficiency. Our facilities and equipment have been in operation for many years and may be subject to unscheduled downtime for unanticipated maintenance or repairs that are more frequent than our planned turnaround for facilities and equipment. In addition, our planned turnarounds for facilities and equipment reduce our revenues during the period of time that such assets are not operating and may take longer than anticipated to complete. Delays or cost increases beyond our control related to the engineering and construction of new facilities or improvements and repairs to existing facilities and equipment caused by delays in or denials of permits, disruptions to transportation, labor disagreements resulting in work stoppage, non-performance of vendors, or increases in financing costs, could have a significant impact on our petroleum business. If we are unable to make up for the delays or to recover the related costs, or if market conditions change, we could materially and adversely affect our financial condition, results of operations or cash flows. One of the ways we may grow our business is through the conversion or expansion of our existing facilities, such as the conversion of the Wynnewood Refinery's hydrocracker to an RDU and the conversion of a hydrotreater to renewable diesel service at the Coffeyville Refinery, **which were completed in 2022 and 2023, respectively.** If we are unable to complete capital projects at their expected costs or in a timely manner, our financial condition, results of operations, or cash flows could be materially and adversely affected. Delays in making required changes or upgrades to our facilities could subject us to fines or penalties and also affect our ability to supply certain products we make. Moreover, we may construct facilities to capture anticipated future growth in demand for refined products or renewable diesel in a region in which such growth does not materialize, **or we may return previously converted equipment to hydrocarbon service based on our expectations concerning market conditions, including but not limited to renewable diesel margins and contractual obligations,** and our revenue may not increase immediately upon the expend of funds on a particular project. In addition, the long- term success of our Petroleum Segment depends on our ability to effectively address energy transition matters, which will require that we continue to adapt our existing facilities to potentially ~~December 31, 2022~~ | ~~31~~ changing government requirements, among other things. As a result, new capital investments may not achieve our expected investment return, which could materially and adversely affect our financial position, results of operations or cash flows. Investor and market sentiment towards climate change, fossil fuels, GHG emissions, environmental justice, and other Environmental, Social and Governance ("ESG") matters could adversely affect our business, cost of capital, and the price of our common stock and debt securities. There have been efforts in recent years aimed at the investment community, including

investment advisors, sovereign wealth funds, public pension funds, universities, and other groups, to promote the divestment of securities of companies in the energy industry, as well as to pressure lenders and other financial services companies to limit or curtail activities with companies in the energy industry. As a result, some financial intermediaries, investors, and other capital markets participants have reduced or ceased lending to, or investing in, companies that operate in industries with higher perceived environmental exposure, such as the energy industry. Pension funds at both the United States state and municipal level, as well other countries and jurisdictions across the world, particularly in Europe, have announced plans to divest holdings in companies engaged in fossil fuels activities. If these or similar divestment efforts are continued, the price of our common stock or debt securities, and our ability to access capital markets or to otherwise obtain new investment or financing, may be negatively impacted. Members of the investment community are also increasing their focus on ESG practices and disclosures, including those related to climate change, GHG emissions targets, business resilience under demand- constraint scenarios, and net- zero ambitions in the energy industry in particular, and diversity, equity, and inclusion initiatives, political activities, and governance standards among companies more generally. **In addition to voluntary disclosures in response to investor and stakeholder requests, some governments have also proposed or adopted regulations that impose disclosure obligations with respect to various climate change and other ESG matters.** As a result, we may face negative publicity, increasing pressure regarding our **December 31, 2023 | 34** ESG practices and disclosures, and demands for ESG- focused engagement commenced by investors, stakeholders, and other interested parties. This could result in higher costs, disruption and diversion of management attention, an increased strain on company resources, and the implementation of certain ESG practices or disclosures that may present a heightened level of legal and regulatory risk, or that threaten our credibility with other investors and stakeholders. Investors, stakeholders, and other interested parties are also increasingly focusing on issues related to environmental justice. This may result in increased scrutiny, protests, and negative publicity with respect to our business and operations, and those of our counterparties, which could in turn result in the cancellation or delay of projects, the revocation of permits, termination of contracts, lawsuits, regulatory action, and policy change that may adversely affect our business strategy, increase our costs, and adversely affect our reputation and performance. **For example, in recent years, private litigation has been increasingly initiated against energy companies by local and state agencies and private parties alleging climate change impacts arising from their operations and seeking damages and equitable relief. We cannot reasonably predict whether any such litigation will be initiated against us or, if initiated, what the outcome would be. While we would vehemently defend against any such litigation, we could incur significant costs in such defense and if we failed to prevail and were required to pay significant damages and / or materially alter our business, there could be a material adverse impact on our operations, financial condition or results of operations.** Additionally, members of the investment community may screen companies such as ours for ESG performance and climate- related practices to limit GHG emissions before investing in our common stock or debt securities, or lending to us. Credit ratings agencies are also increasingly using ESG as a factor in assigning their ratings, which could impact our cost of capital or access to financing. There has also been an acceleration in investor demand for ESG investing opportunities, and many institutional investors have committed to increasing the percentage of their portfolios that are allocated towards ESG- focused investments. As a result, there has been a proliferation of ESG- focused investment funds, and market participants seeking ESG- oriented investment products. There has also been an increase in third- party providers of company ESG ratings, and more ESG- focused voting policies among proxy advisory firms, portfolio managers and institutional investors. Some investors and stakeholders are also increasingly focused on pursuing strategies centered on ESG- related activism. In addition, such climate- related trends may lead to decreased demand for products that produce significant GHG emissions and increased demand for products that result in lower emissions than fossil fuel- based products, and our business could be adversely affected. If we are unable to meet the ESG standards or investment, lending, ratings, or voting criteria and policies set by these parties, we may lose investors, investors may allocate a portion of their capital away from us, we may become a target for ESG- focused activism, our cost of capital may increase, the price of our securities may be negatively impacted, and our reputation may also be negatively affected.

Risks Related to the Nitrogen Fertilizer Segment Any decline in U. S. agricultural production or limitations on the use of nitrogen fertilizer for agricultural purposes could have a material adverse effect on the sales, and on our results of operations, financial condition and cash flows. Conditions in the U. S. agricultural industry significantly impact our operating results. The U. S. agricultural industry can be affected by a number of factors, including weather patterns and field conditions, current and projected grain inventories and **December 31, 2022 | 32** prices, domestic and international population changes, demand for U. S. agricultural products, U. S., state and foreign policies regarding trade in agricultural products, and changes in governmental regulations and incentives for ethanol production that could affect future corn- based ethanol demand and production, including the RFS program. Developments in crop technology could also reduce the use of chemical fertilizers and adversely affect the demand for nitrogen fertilizer. All of the foregoing could have a material adverse effect on our results of operations, financial condition and cash flows. Failure by our Coffeyville Refinery **or other third parties** to continue to supply our Coffeyville Fertilizer Facility with pet coke could negatively impact the Nitrogen Fertilizer Segment’ s results of operations. Unlike our competitors, whose primary costs are related to the purchase of natural gas and whose costs are therefore largely variable, our Coffeyville Fertilizer Facility uses a pet coke gasification process to produce nitrogen fertilizer. Our profitability is directly affected by the price and availability of pet coke obtained from our Coffeyville Refinery under the Coffeyville MSA. Our Coffeyville Fertilizer Facility obtained **47-43** % of its pet coke from our Coffeyville Refinery in **2022-2023**. Should our Coffeyville Refinery fail to perform in accordance with the existing agreement or to the extent pet coke from the Coffeyville Refinery is insufficient, we would need to purchase pet coke from third parties on the open market, which could negatively impact our results of operations to the extent third- party pet coke is unavailable or available only at higher prices. Currently, we purchase **December 31, 2023 | 35** 100 % of the pet coke our Coffeyville Refinery produces. However, we are still required to procure additional pet coke at fixed prices from third parties to maintain our production rates. We have contracts for **233-330, 500-000** tons of third- party supply of pet

coke through December ~~2023~~ **2024**. The market for natural gas has been volatile, and fluctuations in natural gas prices could affect our competitive position. Low natural gas prices benefit our competitors that rely on natural gas as their primary feedstock and disproportionately impact our operations at our Coffeyville Fertilizer Facility by making us less competitive with natural gas- based nitrogen fertilizer manufacturers. Low natural gas prices could result in nitrogen fertilizer pricing reductions and impair the ability of the Coffeyville Fertilizer Facility to compete with other nitrogen fertilizer producers who use natural gas as their primary feedstock, which, therefore, would have a material adverse impact on our results of operations, financial condition and ability to pay dividends. The East Dubuque Fertilizer Facility uses natural gas as its primary feedstock, and as such, the profitability of operating the East Dubuque Fertilizer Facility is significantly dependent on the cost of natural gas. An increase in natural gas prices, without a corresponding increase to nitrogen fertilizer pricing, could make the East Dubuque Fertilizer Facility less competitive with producers who do not use natural gas as their primary feedstock. In addition, an increase in natural gas prices in the United States relative to prices of natural gas paid by foreign nitrogen fertilizer producers may negatively affect our competitive position in the corn belt, and such changes could have a material adverse effect on our results of operations, financial condition, and cash flows. Any interruption in the supply of natural gas to our East Dubuque Fertilizer Facility could have a material adverse effect on our results of operations and financial condition. Operations at our East Dubuque Fertilizer Facility ~~depends-~~ **depend** on the availability of natural gas. We have two agreements for pipeline transportation of natural gas with expiration dates in ~~2023 and~~ 2025. We typically purchase natural gas from third parties on a spot basis and, from time to time, may enter into fixed- price forward purchase contracts. Upon expiration of the agreements, we may be unable to extend the service under the terms of the existing agreements or renew the agreements on satisfactory terms, or at all, necessitating construction of a new connection that could be costly and disruptive. Any disruption in the supply of natural gas to our East Dubuque **Fertilizer** Facility could restrict our ability to continue to make products at the facility and have a material adverse effect on our results of operations and financial condition. Our operations are dependent on third- party suppliers, which could have a material adverse effect on our results of operations, financial condition and cash flows. Operations of our Coffeyville Fertilizer Facility depend in large part on the performance of third- party suppliers, including the adjacent third- party air separation plant and a third- party electric supplier. Our East Dubuque Fertilizer Facility operations also depend in large part on the performance of third- party suppliers, including for the purchase of electricity. Should these, or any of our other third- party suppliers fail to perform in accordance with existing contractual arrangements, or should we otherwise lose the service of any third- party suppliers, our operations (or a portion thereof) could be forced to halt. Alternative ~~December 31, 2022 | 33~~ sources of supply could be difficult to obtain. Any shutdown of our operations (or a portion thereof), even for a limited period, could have a material adverse effect on our results of operations, financial condition and ability to pay dividends. Any liability for accidents involving ammonia or other products we produce or transport that cause severe damage to property or injury to the environment and human health could have a material adverse effect on our results of operations, financial condition and ability to pay dividends. Our business manufactures, processes, stores, handles, distributes and transports ammonia, which can be very volatile and extremely hazardous. Major accidents or releases involving ammonia could cause severe damage or injury to property, the environment, and human health, as well as a possible disruption of supplies and markets. Such an event could result in civil lawsuits, fines, penalties and regulatory enforcement proceedings, all of which could lead to significant liabilities. Any damage or injury to persons, equipment or property or other disruption of our ability to produce or distribute products could result in a significant decrease in operating revenues and significant additional costs to replace or repair and insure our assets, which could have a material adverse effect on our results of operations, financial condition and ability to pay dividends.

December 31, 2023 | 36 In addition, we may incur significant losses or increased costs relating to the operation of railcars used for the purpose of carrying various products, including ammonia. Due to the dangerous and potentially hazardous nature of the cargo we carry, in particular ammonia, a railcar accident may result in fires, explosions, and releases of material which could lead to sudden, severe damage or injury to property, the environment, and human health. In the event of contamination, under environmental law, we may be held responsible even if we are not at fault, and we complied with the laws and regulations in effect at the time of the accident. Litigation arising from accidents involving ammonia and other products we produce or transport may result in us being named as a defendant in lawsuits asserting claims for substantial damages, which could have a material adverse effect on our results of operations, financial condition and ability to pay dividends. Risks Related to Our Capital Structure Instability and volatility in the capital, credit, and commodity markets in the global economy could negatively impact our business, financial condition, results of operations and cash flows. Our business, financial condition and results of operations could be negatively impacted by difficult conditions and volatility in the capital, credit, and commodities markets and in the global economy. For example, there can be no assurance that funds under our credit facilities will be available or sufficient, and in such a case, we may not be able to successfully obtain additional financing on favorable terms, or at all; market volatility could exert downward pressure on the price of CVR Partners' common units, which may make it more difficult for us to raise additional capital and thereby limit its ability to grow, which could in turn cause CVR Energy' s stock and / or CVR Partners' unit price to drop; or customers experiencing financial difficulties may fail to meet their financial obligations when due because of bankruptcy, lack of liquidity, operational failure, or other reasons could result in decreased sales and earnings for us. Our indebtedness may increase and affect our ability to operate our businesses, and have a material adverse effect on our financial flexibility, financial condition and results of operations. Although existing credit facilities contain restrictions on the occurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions and, under certain circumstances, additional indebtedness incurred in compliance with these restrictions could be substantial and secured. The level of indebtedness could have important consequences, including the following: (i) limiting our ability to obtain additional financing to fund working capital needs, capital expenditures, debt service requirements, acquisitions, general corporate, or other purposes; (ii) requiring us to utilize a significant portion of cash flows to service indebtedness, thereby reducing our funds available for operations, future business opportunities, and distributions to us and public common

unitholders of CVR Partners; (iii) limiting our ability to use operating cash flow in other areas of our business because we must dedicate a substantial portion of these funds to service debt; (iv) limiting our ability to compete with other companies who are not as highly leveraged, as we may be less capable of responding to adverse economic and industry conditions; (v) limiting our ability to make certain payments on debt that is subordinated or secured on a junior basis; (vi) restricting the way in which we conduct business because of financial and operating covenants, including regarding borrowing additional funds, disposing of assets, and in the case of certain indebtedness of subsidiaries, restricting the ability of subsidiaries to pay dividends or make distributions; (vii) limiting our ability to enter into certain transactions with our affiliates; (viii) limiting our ability to designate our subsidiaries as unrestricted subsidiaries; (ix) exposing us to potential events of default (if not cured or waived) under financial and operating covenants contained in their or their ~~December 31, 2022 | 34~~ respective subsidiaries' debt instruments; (x) increasing our vulnerability to general adverse economic and industry conditions or adverse pricing of products; (xi) increasing the likelihood for a reduction in the borrowing base under ~~the CVR Refining L. P.'s ("CVR Refining")~~ Amended and Restated ABL Credit Facility **(the "CVR Energy ABL Credit Facility"), which certain subsidiaries of the Company are parties to,** following a periodic redetermination could require us to repay a portion of our then- outstanding bank borrowings; and (xii) limiting our ability to react to changing market conditions in our industries and in respective customers' industries. Covenants in our debt agreements could limit our ability to incur additional indebtedness and engage in certain transactions, as well as limit operational flexibility, which could adversely affect our liquidity and ability to pursue our business strategies. Our debt facilities and instruments contain, and any instruments governing future indebtedness would likely contain, a number of covenants that impose significant operating and financial restrictions on us and our subsidiaries and may limit our ability to engage in acts that may be in our long- term best interest, including restrictions on the ability, among other things, to: incur, assume, or guarantee additional indebtedness or issue redeemable or preferred stock; pay dividends or distributions in respect of equity securities or make other restricted payments; prepay, redeem, or repurchase certain debt; enter into agreements **December 31, 2023 | 37** that restrict distributions from restricted subsidiaries; make certain payments on debt that is subordinated or secured on a junior basis; make certain investments; sell or otherwise dispose of assets, including capital stock of subsidiaries; create liens on certain assets; consolidate, merge, sell, or otherwise dispose of all or substantially all assets; enter into certain transactions with affiliates; and designate subsidiaries as unrestricted subsidiaries. Any of these restrictions could limit our ability to plan for or react to market conditions and could otherwise restrict operating activities. Any failure to comply with these covenants could result in a default under existing debt facilities and instruments. Upon a default, unless waived, the lenders under such debt facilities and instruments would have all remedies available to a secured lender and could elect to terminate their commitments, cease making further loans, institute foreclosure proceedings against assets, and force bankruptcy or liquidation, subject to any applicable intercreditor agreements. In addition, a default under existing debt facilities and instruments would trigger a cross default under other agreements and could trigger a cross default under the agreements governing future indebtedness. Our operating segments' results may not be sufficient to service existing indebtedness or to fund other expenditures, and we may not be able to obtain financing to meet these requirements. We may not be able to generate sufficient cash to service existing indebtedness and may be forced to take other actions to satisfy debt obligations that may not be successful. Our ability to satisfy existing debt obligations will depend upon, among other things: future financial and operating performance, which will be affected by prevailing economic conditions and financial, business, regulatory, and other factors, many of which are beyond our control; future ability to borrow under ~~the CVR Refining's Amended and Restated~~ **the CVR Energy Refining's Amended and Restated** ABL Credit Facility and CVR Partners' ABL Credit Facility, the availability of which depends on, among other things, complying with the covenants in the applicable facility; and future ability to obtain other financing. We cannot offer any assurance that our businesses will generate sufficient cash flow from operations, or that we will be able to draw under our credit facilities or from other sources of financing, in an amount sufficient to fund respective liquidity needs. In addition, our board of directors may in the future elect to pursue other strategic options, including acquisitions of other businesses or asset purchases, which would reduce cash available to service our debt obligations. If cash flows and capital resources are insufficient to service existing indebtedness, we may be forced to reduce or delay capital expenditures, sell assets, seek additional capital, restructure or refinance existing indebtedness, or seek bankruptcy protection. These alternative measures may not be successful and may not permit the meeting of scheduled debt service and other obligations. Our ability to restructure or refinance debt will depend on the condition of the capital markets and our financial condition, including that of our operating segments, at such time. Any refinancing of existing debt could be at higher interest rates and may require compliance with more onerous covenants, which could further restrict business operations. The borrowings under our credit facilities bear interest at variable rates and other debt we or they incur could likewise be variable- rate debt. If market interest rates increase, variable- rate debt will create higher debt service requirements, which could adversely affect our cash flow and / or distributions to us. Although we may enter into agreements limiting exposure to higher interest rates, any such agreements may not offer complete protection from this risk. ~~December 31, 2022 | 35~~ We are authorized to issue up to a total of 350 million shares of our common stock and 50 million shares of preferred stock, potentially diluting equity ownership of current holders and the share price of our common stock. Our board of directors may authorize us to issue the available authorized shares of common stock or preferred stock without notice to, or further action by, our stockholders, unless stockholder approval is required by law or the rules of the NYSE. The issuance of additional shares of common stock or preferred stock may significantly dilute the equity ownership of the current holders of our common stock. An increase in interest rates will cause our debt service obligations to increase. Since March 2022, the Federal Reserve has raised its target range for the federal funds rate ~~seven times, including by 25-525~~ **by 525** basis points ~~in March through January 31, 2022-2024~~, **in March through January 31, 2022-2024**, by 50 basis points in May 2022, by 75 basis points in each of June 2022, July 2022, September 2022 and November 2022 and by 50 basis points in December 2022. Furthermore, the Federal Reserve has signaled that additional rate increases are likely to occur for the foreseeable future. An increase in the interest rates associated with our floating rate debt would increase our debt service costs and affect our results of operations and cash flow available for payments

of our debt obligations. In addition, an increase in interest rates could adversely affect our future ability to obtain financing or materially increase the cost of any additional financing. **December 31, 2023 | 38** Risks Related to Our Corporate Structure The Company's reorganization of its entities and assets could trigger increased costs, complexity and risks. In February 2023, the Company completed the transformation of its business to segregate its renewables business, which included the transfer of assets into multiple newly formed entities and the execution of contractual arrangements among the Company's subsidiaries. Such reorganization could subject the Company to increased costs and operational complexity and other risks. The reorganization may not be successful for many reasons, including but not limited to adverse legal and regulatory developments that may affect particular business lines. Failure to manage risks relating to the reorganization could have a material adverse effect on our results of operations, financial condition and cash flows. We are a holding company and depend upon our subsidiaries for our cash flow. We are a holding company, and our subsidiaries conduct substantially all of our operations and own substantially all of our assets. Consequently, our cash flow and our ability to meet our obligations or to pay dividends or make other distributions in the future will depend upon the cash flow of our subsidiaries and the payment of funds by our subsidiaries to us in the form of distributions. Mr. Carl C. Icahn exerts significant influence over the Company, and his interests may conflict with the interests of the Company's other stockholders. Mr. Carl C. Icahn indirectly controls approximately ~~71~~**66**% of the voting power of our common stock and, by virtue of such stock ownership, is able to control or exert substantial influence over the Company, including the election and appointment of directors; business strategy and policies; mergers or other business combinations; acquisition or disposition of assets; future issuances of common stock, common units, or other securities; occurrence of debt or obtaining other sources of financing; and the payment of dividends on the Company's common stock and distributions on the common units of CVR Partners. The existence of a controlling stockholder may have the effect of making it difficult for, or may discourage or delay, a third- party from seeking to acquire a majority of the Company's outstanding common stock, which may adversely affect the market price of the Company's common stock. Mr. Icahn's interests may not always be consistent with the Company's interests or with the interests of the Company's other stockholders. Mr. Icahn and entities controlled by him may also pursue acquisitions or business opportunities in industries in which we compete, and there is no requirement that any additional business opportunities be presented to us. We also have and may in the future enter into transactions to purchase goods or services with affiliates of Mr. Icahn. To the extent that conflicts of interest may arise between the Company and Mr. Icahn and his affiliates, those conflicts may be resolved in a manner adverse to the Company or its other stockholders.

~~December 31, 2022 | 36~~ In addition, in the event of a sale or transfer of some or all of Mr. Icahn's interests in us to an unrelated party or group, a change of control could be deemed to have occurred under the terms of the indenture governing CVR Energy's ~~5. 250 % and 5. 750 % Senior Notes and due 2028,~~ under the indenture governing CVR Partners' ~~6. 125 % Senior Secured Notes due 2028 and under the indenture governing CVR Energy's 8. 500 % Senior Notes due 2029,~~ which, in each case, could require the issuers to offer to repurchase all outstanding notes at 101 % of their principal amount plus accrued interest to the date of repurchase, and an event of default could be deemed to have occurred under ~~the CVR Energy Refining's Amended and Restated~~ ABL Credit Facility and under CVR Partners' ABL Credit Facility, which, in each case, could allow lenders to accelerate indebtedness owed to them. If such an event were to occur, it is possible that we will not have sufficient funds at the time of the change of control to make the required repurchase of notes or repay amounts outstanding under ~~the CVR Energy Refining's Amended and Restated~~ ABL Credit Facility or CVR Partners' ABL Credit Facility, if any. Our stock price may decline due to sales of shares by Mr. Carl C. Icahn. Sales of substantial amounts of the Company's common stock, or the perception that these sales may occur, may adversely affect the price of the Company's common stock and impede its ability to raise capital through the issuance of equity securities in the future. Mr. Icahn could elect in the future to request that the Company file a registration statement to sell shares of the Company's common stock. If Mr. Icahn were to sell a large number of shares into the public markets, Mr. Icahn could cause the price of the Company's common stock to decline. **December 31, 2023 | 39** We are a "controlled company" within the meaning of the NYSE rules and, as a result, qualify for, and are relying on, exemptions from certain corporate governance requirements. A company of which more than 50 % of the voting power is held by an individual, a group, or another company is a "controlled company" within the meaning of the NYSE rules and may elect not to comply with certain corporate governance requirements of the NYSE, including the requirements that a majority of our board of directors consist of independent directors; we have a nominating / corporate governance committee that is composed entirely of independent directors; and we have a compensation committee that is composed entirely of independent directors. We are relying on all of these exemptions as a controlled company. Accordingly, our stockholders may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of the NYSE. In addition, CVR Partners is relying on exemptions from the same NYSE corporate governance requirements described above. We have various mechanisms in place to discourage takeover attempts, which may reduce or eliminate our stockholders' ability to sell their shares for a premium in a change of control transaction. Various provisions of our amended certificate of incorporation and second amended and restated bylaws and of Delaware corporate law may discourage, delay, or prevent a change in control or takeover attempt of our Company by a third- party. Public stockholders who might desire to participate in such a transaction may not have the opportunity to do so. These anti- takeover provisions could substantially impede the ability of public stockholders to benefit from a change of control or change in our management and board of directors. These provisions include preferred stock that could be issued by our board of directors to make it more difficult for a third- party to acquire, or to discourage a third- party from acquiring, a majority of our outstanding voting stock; limitations on the ability of stockholders to call special meetings of stockholders; limitations on the ability of stockholders to act by written consent in lieu of a stockholders' meeting; and advance notice requirements for nominations of candidates for election to our board of directors or for proposing matters that can be acted upon by our stockholders at stockholder meetings. Compliance with and changes in the tax laws could adversely affect our performance. We are subject to extensive tax liabilities, including U. S. **federal** and state income taxes and transactional taxes such as excise, sales / use, payroll, franchise, and withholding taxes. New tax laws and

regulations are continuously being enacted or proposed that could result in increased expenditures for tax liabilities in the future. In August 2022, President Biden signed into law the Inflation Reduction Act. This law imposes, among other things, a 15 % corporate alternative minimum tax on adjusted financial statement income, and a 1 % excise tax on certain corporate stock repurchases occurring after December 31, 2022. ~~We~~ While we do not expect any material impacts from these provisions, ~~it is unclear how they will be implemented by the U. S. Department of Treasury and what, if any, impact they will have on our tax rate. We will continue to evaluate the impact of the Inflation Reduction Act as further information becomes available.~~

~~December 31, 2022 | 37~~ Risks Related to Our Ownership in CVR Partners If CVR Partners were to be treated as a corporation for U. S. federal income tax purposes or if it becomes subject to entity- level taxation for state tax purposes, its cash available for distribution to its common unitholders, including to us, would be substantially reduced, likely causing a substantial reduction in the value of its common units, including the common units held by us. The anticipated after- tax economic benefit of an investment in common units of CVR Partners depends largely on it being treated as a partnership for U. S. federal income tax purposes. Despite the fact that CVR Partners is organized as a limited partnership under Delaware law, it would be treated as a corporation for U. S. federal income tax purposes unless it satisfies a “ qualifying income ” requirement. CVR Partners may not find it possible to meet this qualifying income requirement, may inadvertently fail to meet this qualifying income requirement, or a change in current law could cause CVR Partners to be treated as a corporation for U. S. federal income tax purposes or otherwise subject CVR Partners to entity- level taxation. If CVR Partners were to be treated as a corporation for U. S. federal income tax purposes, it would pay U. S. federal income tax on all of its taxable income at the corporate tax rate. Distributions to its common unitholders (including us) would generally be taxed again as corporate distributions, and no income, gains, losses, or deductions would flow through to such common unitholders. Because a tax would be imposed upon CVR Partners as a corporation, its cash available for distribution to its common unitholders would be substantially reduced. Therefore, treatment of CVR Partners as a corporation would result in a material reduction in the anticipated cash flow and after- tax return to its common unitholders (including us), likely causing a substantial reduction in the value of such common units. **December 31,**

2023 | 40 We may have liability to repay distributions that are wrongfully distributed to us. Under certain circumstances, we may, as a holder of common units in CVR Partners, have to repay amounts wrongfully returned or distributed to us. Under the Delaware Revised Uniform Limited Partnership Act, a partnership may not make distributions to its unitholders if the distribution would cause its liabilities to exceed the fair value of its assets. Delaware law provides that for a period of three years from the date of an impermissible distribution, limited partners who received the distribution and who knew at the time of the distribution that it violated Delaware law will be liable to the company for the distribution amount. Public investors own approximately 63 % of the Nitrogen Fertilizer Segment through CVR Partners. Although we own the general partner of CVR Partners, the general partner owes a duty of good faith to public unitholders, which could cause them to manage their respective businesses differently than if there were no public unitholders. **As of December 31, 2023, Public-public** investors own approximately 63 % of CVR Partners' **outstanding** common units. We are not entitled to receive all of the cash generated by CVR Partners or freely transfer money to finance operations at the Petroleum Segment. Furthermore, although we own the general partner of CVR Partners, the general partner is subject to certain fiduciary duties, which may require the general partner to manage its business in a way that may differ from our best interests. CVR Partners is managed by the executive officers of its general partner, who are employed by and also serve as part of the senior management team of the Company. Conflicts of interest could arise as a result of this arrangement. CVR Partners is managed by the executive officers of its general partner, who are employed by and also serve as part of the senior management team of the Company. Furthermore, although CVR Partners has entered into a service agreement with the Company under which it compensates the Company for the services of its management, our management is not required to devote any specific amount of time to the Nitrogen Fertilizer Segment and may devote a substantial majority of their time to other business of the Company. Moreover, the Company may terminate the services agreement with CVR Partners at any time, subject to a 90- day notice period. In addition, key executive officers of the Company, including its president and chief executive officer, chief financial officer, and general counsel, will face conflicts of interest if decisions arise in which CVR Partners and the Company have conflicting points of view or interests. ~~The potential spin- off of our interest in the nitrogen fertilizer business could involve significant time and expense and management attention, could disrupt or adversely affect the consolidated or separate businesses, results of operations and financial condition and may not be completed in accordance with the expected terms or anticipated timelines, or at all and may not achieve the intended results.~~

~~December 31, 2022 | 38~~ On November 21, 2022, we announced that our Board authorized management to explore a potential spin- off of our interest in the nitrogen fertilizer business, which is owned by CVR Energy through the general and limited partner interests we hold in CVR Partners. Such a transaction would likely involve creating a new and independent, publicly traded company (“ SpinCo ”) through a tax- free distribution to our stockholders of stock in SpinCo. Unanticipated developments could delay, prevent or otherwise adversely affect the potential spin- off, including but not limited to disruptions in general market conditions or potential problems or delays in obtaining various regulatory and tax approvals or clearances. In addition, consummation of the potential spin- off would be subject to certain conditions, including, among others, final approval of our Board, the receipt of a favorable opinion with respect to the tax- free nature of the transaction, and the effectiveness of a Form 10 registration statement with the SEC. There can be no assurance that the potential spin- off transaction will be completed in the manner described, or at all, and we have not set a timetable for completion of any such transaction. We expect that the process of continuing to explore and, if approved, completing the potential spin- off, will be time- consuming and involve significant expenses. In addition, completion of the potential spin- off would require significant amounts of management' s time and effort which may divert management' s attention from other aspects of our business operations. The potential spin- off would also require modifications to our systems and processes used to operate our business. We may experience delays, increased costs and other difficulties related to these modifications which could adversely affect our business, financial condition and results of operations. Following the potential spin- off, we would be a smaller, less diversified company

with a narrower business focus and may be more vulnerable to changing market conditions, which could adversely affect our operating results. We may also experience increased difficulties in attracting, retaining and motivating employees during the pendency of the potential spin-off and following its completion, which could harm our business. Further, if the potential spin-off is completed, the anticipated benefits and synergies of the transaction, strategic and competitive advantages of each company, and future growth and other opportunities for each company may not be realized within the expected time periods or at all. Failure to implement the potential spin-off effectively could also result in a lower value to our company and our stockholders. The potential spin-off may result in disruptions to, and negatively impact our relationships with, our customers and other business partners. Parties with which we do business may experience uncertainty associated with the potential spin-off, including with respect to current or future business relationships with us. Our business relationships may be subject to disruption as customers, vendors and others may attempt to negotiate changes in existing business relationships or consider entering into business relationships with parties other than us. These disruptions could adversely affect our business, including adversely affecting our ability to realize the anticipated benefits of the potential spin-off. If the potential spin-off does not qualify as a transaction that is generally tax-free for U. S. federal income tax purposes, the potential spin-off could result in substantial tax liability. If we pursue the potential spin-off, we intend to obtain an opinion as to the tax-free nature of the spin-off under the U. S. Internal Revenue Code of 1986, as amended. The opinion would be based, among other things, on various factual assumptions and representations we would make. If any of these assumptions or representations are, or become, inaccurate or incomplete, reliance on the opinion and ruling may be jeopardized. If the potential spin-off would not qualify for tax-free treatment for U. S. federal income tax purposes, the resulting tax liability to us and to SpinCo stockholders could be substantial.

General Risks Related to CVR Energy The acquisition, expansion and investment strategy of our businesses involves significant risks. From time to time, we may consider pursuing acquisitions **of businesses or assets** and expansion projects to continue to grow and increase profitability. We also may make investments in other entities. There can be no assurance that we will be able to consummate any acquisitions or expansions, successfully integrate acquired businesses or entities, or generate positive cash flow at any acquired company or expansion project. Challenges that may lead to failed consummation of an expansion / acquisition include intense competition for suitable acquisition targets, the potential unavailability of financial resources necessary, difficulties in securing sufficiently favorable terms, and the failure to obtain requisite regulatory or other governmental approvals or the approval of equity holders of the entities in which we have invested, **and efforts concerning an expansion / acquisition will require significant time and attention from our management, which could distract them from the operation of our business**. In addition, any future acquisitions, expansions or **December 31, 2022 | 39** investments may entail significant transaction costs and risks associated with entry into new markets and lines of business, including but not limited to new regulatory obligations and risks, and integration challenges such as disruption of operations; failure to achieve financial or operating objectives contributing to the accretive nature of an acquisition; strain on controls, procedures and management; the need to modify systems or to add management resources; the diversion of management time from the operation of our business; customer and personnel retention; assumption of unknown material liabilities or regulatory non-compliance issues; amortization of acquired assets, which would reduce future reported earnings; and possible adverse short-term effects on our cash flows or operating results. Also, our investments may not be successful for many reasons, including, but not limited to, lack of control; worsening of general economic and market conditions; or adverse legal and regulatory developments that may affect particular businesses. Failure to manage these acquisition, expansion and investment risks could have a material adverse effect on our results of operations, financial condition and cash flows. Our joint ventures involve similar risks. **December 31, 2023 | 41** We are subject to the risk of becoming an investment company. From time to time, we may own less than a 50 % interest in other public companies, which exposes us to the risk of inadvertently becoming an investment company required to register under the Investment Company Act **of 1940** (“ICA”). Events beyond our control, including significant appreciation or depreciation in the market value of certain of our publicly traded holdings or adverse developments, could result in our inadvertently becoming an investment company required to register under the ICA and subject to extensive, restrictive and potentially adverse regulations relating to, among other things, operating methods, management, capital structure, dividends and transactions with affiliates, and could also be subject to monetary penalties or injunctive relief for failure to register as such. Internally generated cash flows and other sources of liquidity may not be adequate for the capital needs of our businesses. Our businesses are capital intensive, and working capital needs may vary significantly over relatively short periods of time. For instance, crude oil price volatility can significantly impact working capital on a week-to-week and month-to-month basis. If we cannot generate adequate cash flow or otherwise secure sufficient liquidity to meet our working capital needs or support our short-term and long-term capital requirements, we may be unable to meet our debt obligations, pursue our business strategies, or comply with certain environmental standards, which would have a material adverse effect on our business and results of operations. Our ability to pay dividends on our common stock is subject to market conditions and numerous other factors. Dividends are subject to change at the discretion of the board of directors and may change from quarter to quarter and may not be paid at historical rates or at all. Our ability to continue paying dividends is subject to our ability to continue to generate sufficient cash flow from our operating segments, and the amount of dividends we are able to pay each year may vary, possibly substantially, based on market conditions, crack spreads, our capital expenditure and other business needs, covenants contained in any debt agreements we may enter into in the future, covenants contained in existing debt agreements, and the amount of distributions we receive from CVR Partners. If the amount of our dividends decreases, the trading price of our common stock could be materially adversely affected as a result.